

MULHENS' ORIGINAL No. 4711 BRAND OF EAU DE COLOGNE

THE
Blue & Gold Labelled

EXTRACT OF

DOUBLE STRENGTH

IS RETAILED AT THE

LONDON BRANCH

AT

2/ per 4 oz. bottle

OR

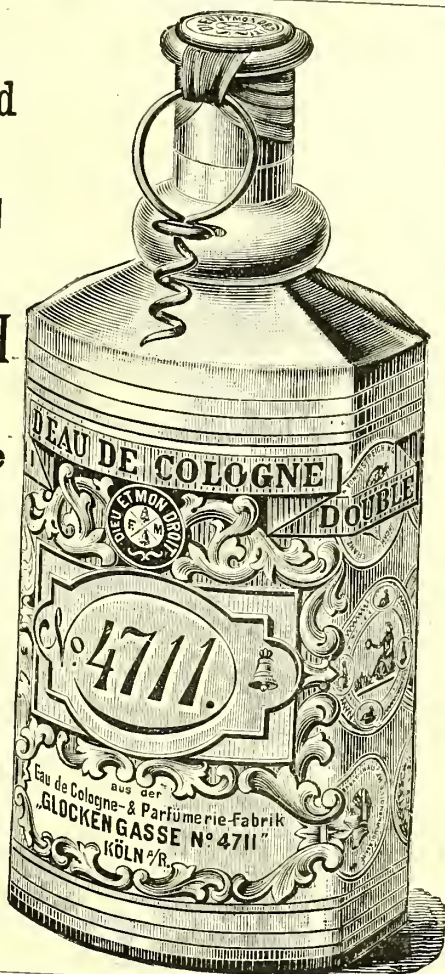
12/ per case of six.

HIGHEST

AWARDS

WHEREVER

EXHIBITED.



THE

Blue & Gold Labelled

EXTRACT OF

DOUBLE STRENGTH

IS

The PUREST

The STRONGEST

The MOST LASTING

YET

The MOST DELICATE

EVER PRODUCED.

NEVER VARIES

IN

QUALITY.

ONLY FIRST PRIZE AT COLOGNE, 1875.

WHEN ORDERING DO NOT OMIT TO MENTION THE

No 4711 AND THE BLUE AND GOLD LABEL.

OF ALL WHOLESALE FIRMS IN THE UNITED KINGDOM.

Manufacturer: FERD. MÜLHENS, 4711 Glockengasse, Cologne-on-Rhine.

BRANCHES AT NEW YORK, VIENNA, RIGA, ODESSA, AND

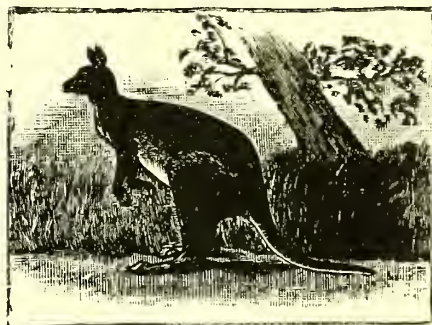
LONDON, 62 NEW BOND STREET, W.

Mr. R. REUTER, Wholesale and Export Agent. SHIPPERS are requested to communicate with Mr. Reuter. See also "The Chemist and Druggist" of 24 Dec., 1892, page 906.

KANGAROO EUCALYPTUS OIL

25-lb. Tins.

KANGAROO



TRADE MARK.

25-lb. Tins.

BRAND.

It is admitted to be the Purest Eucalyptus Oil yet introduced to the public.
To be obtained of your Wholesale Druggist.

SOLE CONSIGNEES—LAUGHLAND, MACKAY & BAKER, 50 Lime St., LONDON.

COLONIAL ADDRESS—A. M. BICKFORD & SONS, WHOLESALE DRUGGISTS, ADELAIDE.
46 CURRIE STREET,

S. V. METH.

JONES & COMPANY,
COPPERFIELD ROAD,
LONDON, E.

LARGEST MAKERS IN THE KINGDOM.

We are prepared to supply METHYLATED SPIRIT
5-gallon quantities at Lowest Prices.

REDUCTIONS TO LARGE BUYER.
SAMPLES FREE.

BOORD & SON,

DISTILLERS, FOREIGN WINE AND SPIRIT MERCHANTS, AND METHYLATED,
ALLHALLOWS' LANE AND BARTHOLOMEW CLOSE, LONDON, E.C.

Quotations for S.V.R. Methylated Spirit and Finish on application.
FINEST ORANGE WINE FOR QUININE

JAMES
BURROUGH,

FINE PORT (without tannin)
FINE SHERRY (for Medicinal uses, &c.)
FINE MALAGA (for Steel Wine, &c.)
FINE BURGUNDY (for invalids)
S.V.R. and Methylated Spirit at lowest present prices.

CALE ST. DISTILLERY

All at Lowest Prices
specially recommended

CHELSEA

NON-POISONOUS! NON-CAUSTIC! NON-CORROSIVE!

“**IZAL**”

**THE NEW
NON-POISONOUS
ANTISEPTIC,**

Prevents infection in cases of Cholera,
Small-pox, Diphtheria, Influenza, Scarlet,
Typhus, and Typhoid Fevers, and prac-
tically covers the whole field of Infectious
Diseases.

**RETAIL IN BOTTLES,
1/-, 2/6 & 4/6**

SOLE PROPRIETORS AND MANUFACTURERS—

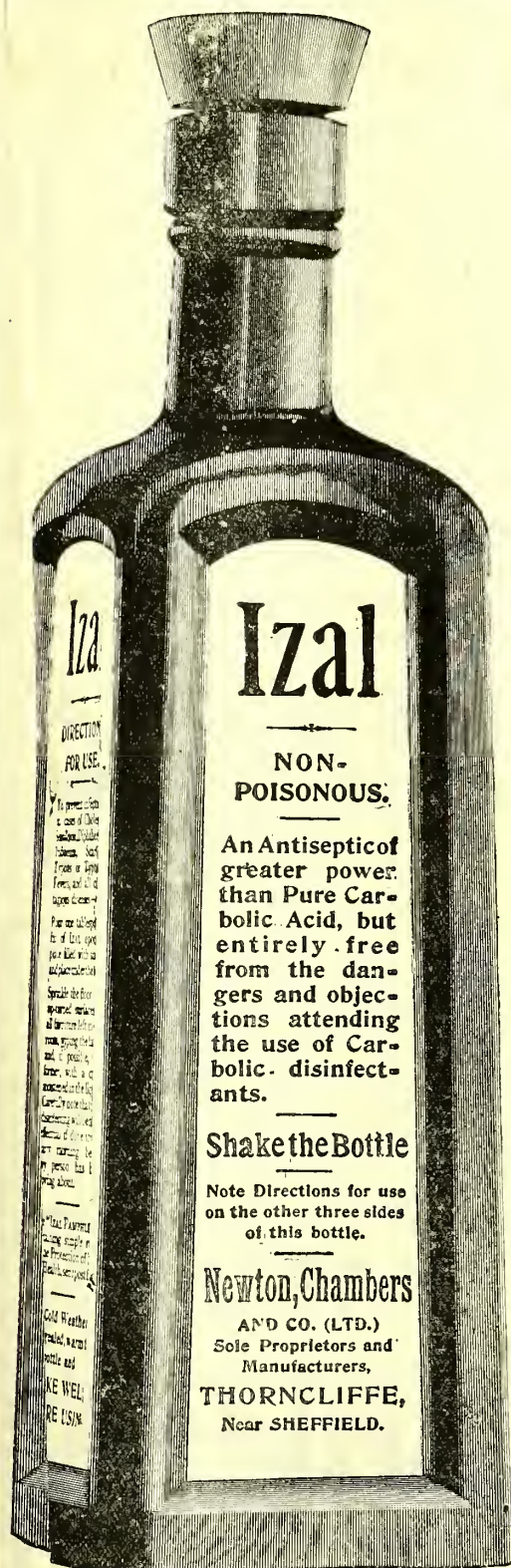
**NEWTON, CHAMBERS & Co., LTD.
THORNCLIFFE, SHEFFIELD.**

LONDON OFFICES—

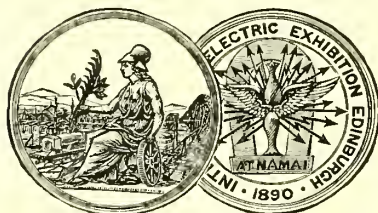
19 Great George Street, Westminster; and Thorncliffe
House, 331 Gray's Inn Road, W.C.

Reports on IZAL by the highest Medical and Sanitary Experts,
with Papers giving Uses and Applications, sent post free.

**IZAL IS STOCKED BY ALL WHOLESALE
AND EXPORT HOUSES.**



Fac-sim of the One Shilling Bottle, which will make 10 Gallons
of Strong, Reliable, Non-poisonous Disinfectant.

WANDSWORTH CHEMICAL WORKS, LTD.**CARBOLIC DISINFECTANTS.**

Silver Medal, Edinburgh, 1890. Highest Award.

CARBOLIC POWDER: Pink, White or Grey

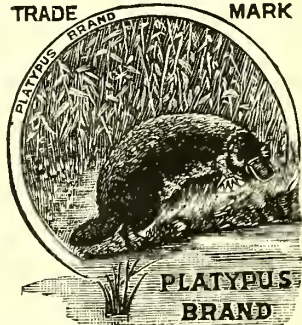
Any strength. Packets, Tins, and in Bulk.

CARBOLIC ACIDS: CRUDE,
95/97% PALE, and WATER WHITE.**SANITARY FLUID** or CREOSOL:

Bottles, Drums, and Casks.

IMMEDIATELY SOLUBLE IN COLD WATER.

Gold Medal, Jamaica, 1891. Highest Award.

"PINEOTAS" DISINFECTANTS.**"PINEOTAS" POWDER, FLUIDS, AND OIL.****CONCENTRATED FLUID SHEEP DIP****CARBOLIC AND "PINEOTAS" SOAPS, PETROLEUM
JELLY, CHLORIDE OF LIME, &c.****WORKS & WHARF: THE CAUSEWAY, WANDSWORTH, S.W.****TASMANIAN
EUCALYPTUS OIL COMPANY.**REGISTERED
TRADE MARKObtained
First Award
and
Gold Medal
—
1891-92.at the
Tasmanian
Exhibition
—
1891-92.**OIL OF EUCALYPTUS GLOBULUS**From the Native "Blue Gum" Tree of Tasmania.
Pure, fragrant, and of highest medicinal value, as shown by H. Helbing,
F.C.S., and Dr. Passmore.3d. Samples (2/- per dozen) and in Bottles for Retailing
at 1/-, 2/6, 4/6. Also in 1-lb. Bottles, for Dispensing.**EUCALYPTUS PASTILLES.****HIGH-CLASS****EUCALYPTUS SOAP****OF ALL WHOLESALE HOUSES.**For samples and Helbing's Pharmacological Record, write to the
London Offices—138 Leadenhall St., E.C.

TELEGRAPHIC ADDRESS—"EUCALYPTUS LONDON."

NEW SOAPS

MANUFACTURED BY

**F. C. CALVERT & CO.,
MANCHESTER.***Good Value, Easily Sold, and Price not named on Tins
or Boxes.***Coal Tar Soap, Pine Soap, Carbolic Soap, Carbolic &
Sulphur Soap.**

Paper-wrapped Tablets, averaging about 4 to the pound.

1 dozen boxes, each 1s. 8d. } Subject to Trade Discount.
3 " " 4s. 6d.* * * Order above as Calvert's **HYGIENIC Brand**.**FULLER'S EARTH SOAP, PUMICE SOAP, &
PETROFENIC SOAP (for the Hair).**paper-wrapped Tablets, averaging about 2½ oz. each. 1 dozen
each 1s. 3d., less Trade Discount.* * * Order above as **CALVERT'S**.**WHOLESALE & EXPORT orders****MASON'S**

PERFUMED SOLUTION OF

CARBOLIC ACID

Should be addressed to

C. E. MASON & Co., 2 Beech St., LONDON, W.**TERMS UPON APPLICATION.**



CARBO-EUCALYPTINE

VOLATILE AIR-PURIFYING

SANITARY TABLETS.

Supplied to the Houses of Parliament, Hospitals, Hotels, Railway Companies, Board Schools, Shipping, and 50,000 Dwellings, &c.

From S. J. COURTNEY PAIN, Medical Officer in Charge, GAILKORA, BENGAL, June 19, 1892:—
"I have found the Carbo-Eucalyptine Sanitary Tablets of great value in my Cholera Camp. Please send at once a six months' supply for our Hospital here," &c., &c., innumerable.

First Sample Dozen 3/6 (Parcel Post), Showcard, &c.,
For Cash with Order, or £2 a Gross, from all Chemists' Sundrymen, or the

EUREKA MANUFACTURING COMPANY, CLAPTON PARK, LONDON.

Especially put up for India and Tropics, and minus price.

AVERAGE RETAILER'S SALES 4-GROSS WEEKLY.



DUSSEK BROS. & CO.'S SOLUBLE SANITARY FLUID (MILKY), CARBOLIC ACIDS & POWDERS

Of all strengths, in various packages for the Trade and for Export.

Also Sheep Dip, Tar and Rosin Products, Dubbin, Greases, Creosote, Brunswick Black, &c.

DUSSEK'S WHARF, VERNEY ROAD, S.E.

TELEPHONE NO. 4833.

TELEGRAMS—"DUSSEK LONDON."

SALICYLIC ACID

AND

SALICYLATES

MANUFACTURED UNDER KOLBE'S PROCESS BY

J. HAUFF, FEUERBACH - STUTTGART.

To be obtained from the Sole Agents.

N.B.—Stock kept in London.

FUERST BROS., 17 PHILPOT LANE, LONDON, E.C.

Telegrams—"FUERST LONDON." Telephone No. 1050.

In Stock, upwards of 50,000,000

TURNED WOOD BOXES,

BOTTLE CAPS,

AND

ALL KINDS OF TURNERY.

MAXIME & CO.

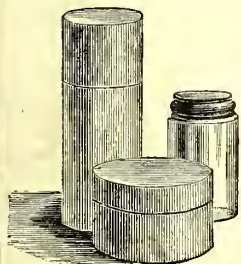
General Wood & Bone Turners.

WAREHOUSES & OFFICES:

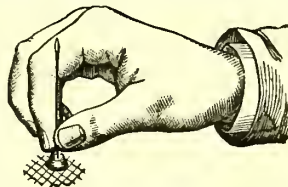
**150 OLD STREET,
London, E.C.**

FACTORIES AND SAW MILLS, LARGEST IN THE WORLD.

At Gothenburg, SWEDEN, and Boulogne-sur-Mer, FRANCE.
Any Special Articles made to order.



Trade Mark.



Registered.

THE

ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH,
12x PALL MALL EAST, LONDON, S.W.

SOLE AGENTS FOR

DR. WARLOMONT'S CALF VACCINE

Tubes, 2s. each; Half-tubes, 1s. each. Pomade in vials, 5s.
HUMAN VACCINE, from healthy children only, microscopically examined and source quoted. Tubes two-thirds full, 1s. 8d. each; Tubes one-third full, 1s. each; Tubes two-thirds full (same as those mentioned above, but without source), in quantities for export, 25 per 100 Tubes. Pin-points, uncharged, 1s. per dozen. Vaccine Ejectors, 1s. 3d. each, including postage. P.O.O.'s (including postage) and crossed London and Westminster Bank) with orders, payable to EDWARD DARKE, Secretary.

Office Hours 10 to 4. Saturdays, 10 to 2.

COOK'S PURE TOILET SOAPS.

SPECIALITIES:—COOK'S SAVON DE LUXE. The most luxurious soap made.

COOK'S "RIVIERA" (SUPER-FATTED). Specially prepared for delicate and sensitive skins.

SPECIALITIES MADE FOR THE TRADE.

COOK'S GOLD MEDAL ANTISEPTIC SOAP. (Thomson's Patent.)

For curing and relieving Eczema, Ringworm, and all skin affections.

SIX PRIZE MEDALS AT GREAT EXHIBITIONS FOR EXCELLENCE AND PURITY.

Can be obtained through

Messrs. S. MAW, SON & THOMPSON, LONDON, or from E. COOK & CO., LONDON.

JOSEPH WATSON & SONS,

MANUFACTURERS OF

GLYCERINE

DOUBLE DISTILLED CHEMICALLY PURE, 1260 Sp.G.,

ALSO FOR

NITRO-GLYCERINE AND OTHER MANUFACTURING PURPOSES.

PACKED IN 10 AND 5 CWT. IRON DRUMS, TO BE RETURNED, AND IN 56 LBS. TINS FREE.

WHITEHALL SOAP WORKS, LEEDS.

NAME STAMPED **GRATIS**

BEST & SAFEST DENTIFRICE On Orders of

SOLD BY ALL CHEMISTS
AND PERFUMERS, IN
ELEGANT CRYSTAL
TOILET CASKET.

PRICE 2/6.

ALSO IN PATENT
METALLIC BOX

PRICE 1/-



3 doz.

Through any
Wholesale
House,
or direct to

OSCAR SUTTON & CO., Preston, Lancs.

PARAFFINUM MOLLE, B.P.

ABSOLUTELY FREE FROM ALKALI
ABSOLUTELY FREE FROM ACID

HAS NOW STOOD THE
TEST OF YEARS,
AND
ESTABLISHED
ITSELF
AS

PETROLINA
MANUFACTURED IN AMERICA.

Petroleum Jelly

Supplied by all
Wholesalers. In Casks of 3 cwt.
In Kegs of 1 cwt., ½ cwt., and ¼ cwt.
In Tins of 14 lbs., 5 lbs., and 1 lb.
In bottles (without Labels) of 2 oz. and 4 oz.

**BINGHAMTON OIL REFINING CO., NEW
YORK STATE, U.S.A.**

London Agency—3 COLEMAN ST., E.C.

H. P. TRUEFITT'S SPECIALITIES FOR THE HAIR.

Floral Extract, 3/6, 5/-,
10/6, 21/-

Egg Yulep, 2/-, 4/-

CONCENTRATED

Egg Yulep, 2/6,

5/-, 10/6.

Golden Fluid,

10/6, 21/-

EUXURON,

1/6.

&c.

Stimulating Lotion, 5/-,
10/6.

Astringent and Tonic

Lotion, 5/-, 10/6.

Quinine and Arnica

Hair Wash, 3/6,

5/-, 10/6, 21/-

Arnica Wash,

3/6, 5/-,

10/6.

&c.

EUCHRISMA.
Combines in one clear Fluid every valuable
component both of a Hair Grease and Wash.
3/6, 5/-, 10/6, 21/-.



An elegant Preparation for
the Hair and Beard.
Price 2/6, 3/6, 5/-, 10/6, 21/-.

EAU RACINE.
For restoring the original colour of Grey Hair,
or turning it to all other Restorers, being perfectly
simple in its Composition. Price 6/-.

BRILLANTINE

H. P. TRUEFITT'S TONIC TOOTH BRUSH

(BY ROYAL LETTERS PATENT.)

PRICE ONE SHILLING.

10 & 21 Burlington Arcade; 13 & 14 Old Bond St., London.

ABRAHAM LINCOLN said :

“You can fool some people all the time, you can fool all the people sometimes, you can't fool all the people all the time.”

All the people cannot detect alum in baking powder, starch in infant foods, salicylic acid in beer, oleo-margarine in butter, or 30 to 40 per cent. of resin, sugar (not to speak of bad fats used), &c., in soaps. Soap-makers know this, and the one who talks longest and strongest hopes to fool the most people all the time.

Now, there is no going beyond chemical tests. “VINOLIA” SOAP is probably the only one you ever used of which the analysis is published. It is pure, cleansing, and agreeable, but it will not restore the bloom of youth to the skin at 4 o'clock in life's afternoon. It is safe and efficient—that is all. What more do you want?

“*Vinolia*” Soap (for *Delicate, Sensitive Skins*), Premier, 4d.; Floral, 6d.; Balsamic, 8d.; Toilet, 10d.; and Vestal, 2s. 6d. per Tablet.

“*Vinolia*” Cream (for *Itching, Face Spots, &c.*), 1s. 1½d., 1s. 9d. per box.

“*Vinolia*” Powder (for *Redness, Roughness, &c.*), 1s., 1s. 9d. per box.

BLONDEAU ET CIE., RYLAND ROAD, LONDON, N.W.

E. WITROFSKY,

Drug and Chemical Merchant,
22 FENCHURCH ST., LONDON, E.C.

PURITY GUARANTEED.

Oleum Absinthii, Amygdalæ Dulcis, ditto Essent., Anisi (H. & W.), Bergamotæ, Caryophylli, Cognac, Coriandri, Geranii (Vimard & Co.), Iridis (Vimard & Co.), Juniperi, Lavendulæ, Limonis, Menth. Pip. (H. G. Hotchkiss), Pini Pumilionis, Sylvestris, Rosmarini, &c., &c., &c.

OTTO OF ROSE (Pure Virgin).

SPECIALITIES:—

CAMELINE (substitute for Burnt Sugar). 20 times stronger than Caramel.

SOLUBLE ESSENCE OF ORRIS (Maubert Fils & Vimard).

CONCENTRATED PERFUMES, POMADES, FLOWER-WATERS.

Carbolic Acid, Liquid, 25 per cent.

Carbolic Acid, „ 50 „

Carbolic Acid, Liquid, 95 per cent.

Carbolic, Crystal, 35° to 70°.

STOCK KEPT IN LONDON

SOZIO & ANDRIOLI

ESTABLISHED A.D. 1757.]

GRASSE (Alpes Maritimes), FRANCE.

Neroly, Lavender, Geranium, Orris, Patchouly, Thyme, Rosemary, Spike, Santal, &c.

CONCENTRATED PERFUMES.

CONCRETE ESSENTIAL OILS.

FLOWER POMADES at the highest possible Saturation. ROSE & ORANGE FLOWER WATER, Sweet Almond Oil.

London Agent—MR. FREDK. BOEHM, 4 CULLUM ST., E.C.

STOCK KEPT IN LONDON

R C TREATT

Dunster House Mincing Lane

LONDON

IMPORTER OF

Musk Civet Ambergris Attar - of - Rose

ESSENTIAL OILS



Wholesale
and
Export
only

APPLICATION
ON

QUOTATIONS

AND

PRICE LIST

ENEMIES OF THE TRADE.

We have this week been favoured with vague threats by persons antagonising our efforts against ruinous competition. The opposition we encounter is bitter and the language used is not the choicest, but all this we do not mind. What we do mind, though, is these "go-as-you-please" champions of demoralised trade continuing to exert themselves on the side of "cut-throat" business, crying out "failure," and doing what they can to neutralise our efforts in favour of the fair-profit policy, and so if possible make it a failure. All we ask of such gentlemen is, if they will not comply with the terms of our agreement which has been signed by thousands of retailers, and all the strictly wholesale houses in Great Britain but one, they will be good enough to leave our goods alone. Instead of this last they pursue subterranean methods in order to supply "Vinolia" Preparations, as they cannot afford to lose the profits in their business and have not dared to run the risk of offending their own customers by declining sales, as they know the extensive demand for "Vinolia" products created by their quality and our extensive advertising. Now these persons who employ clandestine methods against us scream themselves hoarse when they find the same tactics employed against them. If you want to make a rat or rabbit bolt out of its hole, you have to ferret it out, and the underground dealers in "Vinolia" Soap should not "cry out" when they find the ferrets are after them. Our desire is to treat the trade with every consideration, promote the business of all, and secure to every dealer in "Vinolia" Soap a fair living profit; but we cannot be over-nice with the enemies of the fair-profit movement, in consideration of our agreement with the trade throughout the country, who rely upon us, and we shall stamp out their business in "Vinolia" Soap if we can, regardless of all trouble or expense. This is a matter of the most vital interest to the retailers throughout Great Britain, for business men cannot live without a fair living profit on their sales, and there must be no winking at "rat businesses," as printers say.

With a minimum of trouble to retailers, we have been successful up to the present in maintaining fair living prices on "Vinolia" Preparations, and we note with satisfaction that firms like Messrs. Cadbury and others have taken a somewhat similar stand to our own. In future we propose to adopt somewhat more stringent measures in certain directions, and, if we mistake not, those firms who have ignored the interests of the trade and are active "the wrong way," may have some wholesome correction administered to them by their brethren.

We acknowledge freely the assistance—yes, generous support—rendered us by our many friends, but, you know, the battle is not yet won. There is, no doubt, many a one on the anxious seat, and some who are at present very sore. So we must therefore keep our eyes open. We promise that any information received will be regarded as strictly private and confidential, and shall not be divulged without the previous consent in writing of the giver. We also undertake to indemnify informants against any possible legal expense or loss of time in the matter. We can assure our friends that we do not lose any time in following up "extreme cutters" and their ilk. We would ask for even more hearty co-operation, if possible, on the part of retailers, in assisting us to ferret out those who are the enemies to the "fair-profit covenant," and so not leave quite so much "private inquiry" and expensive inquisitorial work for us to do.

Finally, we will give £5 to the first person giving us information during the next fortnight of anyone supplying "Vinolia" Preparations to those who are inimical to the anti-cutting movement, and in case any assistants lose their positions in consequence of informing us, we will see they do not suffer. The most dangerous enemies to the trade, in our opinion, are those who, with sham pretence to loyalty, will not give any reasonable undertaking to support the trade, and who continue to obtain our goods clandestinely, and it is particularly against such as these that we ask the trade at this time to unite with us to put down "extreme cutting," which might temporarily benefit a very few, but which spells RUIN FOR THE MANY.

We would recommend those who criticise us so hotly to tell the retailers what they have done for their benefit. Absolutely nothing.

BLONDEAU ET CIE.

EXCHANGE COLUMN.**FOR DISPOSAL.****Proprietary Articles.**

Two gross Judson's 6d. dyes, assorted, 2s. 3d. doz., or exchange for specie-jar (good) or oak antiques to value. Frowde, Douglas, I.O.M.
Thirty bottles Rooke's elixir, 4s. 6d., at 34s. 6d. doz.; 10 bottles ditto, large, at 90s. doz.
255/37, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

Dental.

Dental instruments and appliances; bargains; secondhand; list sent; state wants. Elliott & Co., 30 Hanover Street, Edinburgh.
Nine nickel-plated dental forceps and elevator, perfect condition, 35s.; 1 spring-bolt dental-key, ivory handle, 5s. O. Bayley, Chemist, Walsall.

Formulæ.

For sale, 130 well-tried recipes, neatly copied in book, post, 1s. 6d. Tully, Chemist, Hastings.
For sale, recipe for non-exeisable ginger-wine essence; an original formula, producing an essence of great aroma and fine flavour; no alcohol used; price 5s. R. B. Huggins, Chemist, Wainfleet, R.S.O.

Educational.

Woodford's "Cæsar," 9d.; Gibson's "Entropius," 6d.; Valpy's "Delectus," 9d.; "Praxis Latina" (Collis), 2s. 6d., 9d.; "Cornelius Nepos" (Bradley), 5s., 1s. 3d.; "Steps to Latin," 3s. 6d., 1s.; Edwards' "Delectus," 2s. 6d., 1s.; "Latin Exercises," 2s. 6d., 9d.; "Latin Reader," 8d.; post free; no approval. Porter, Coleford, Glos.

Literature.

Chemist and Druggist Journals, 1878 to 1892; some numbers missing; what offers? K., 15 Mather Street, Newcastle.

Drugs and Chemicals.

Twenty-eight lbs. pink powdered gelatine, also 13 cwt. job eucalyptus-leaves; what offers? "Delta," 52 High Holborn.

Offered.—Surplus stock.—7-lb. original bottle Howards' pot. bromidi, 1 lb. acid. tannic, 3ij. ol. menth. sativ., Winch. qt. ol. earyoph. opt. (Hill's), 4 lbs. oleum eucalypt. glob., 12 oz. ol. sautal. flav. Ang.; carriage paid London; what offers? Eastman, Forest Lane Pharmacy, Stratford.

Shop Fittings.

A pair of specie-jars, standing 24 in. high, to be sold, a bargain, nearly new. Apply, P. Korner, 60 Brompton Road.

Bank-cashiers' desks and sundry fittings, second-hand, for sale. Apply, James Harvey, 55, 56, 57 Redcross Street, Barbican, E.C.

Second-hand marble mortars and pestles in several sizes, 2s., 4s., 8s., and 16s. each; compo, 1s. to 9s. Natali, 40 Gray's Inn Road, London.

Second-hand blue shop rounds, gold shield labels, with contents in good, clean condition, about 40 doz. 20, 30, and 40-oz. at 10s. doz. average. Natali, 40 Gray's Inn Road, London.

Drawers, 5 nests, 20 mahogany-fronted, in each glass knobs and labels, 4 ft. long by 2 ft. high, 36s. each; 2 nests ditto, 6 ft. long by 2 ft., in good and sound condition, 57s. each. Natali, 40 Gray's Inn Road, London.

Shop-fittings for chemists (secondhand).—Great bargains.—12 ft. run of drawers, shelves and lockers, 12l. 10s.; glass fronted counter, 5l.; dispensing-screen, mirror centre 6l. 10s.; desk and case, 55s.; and other fittings. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Miscellaneous.

Job line, lint about 80 lbs. in packets, 6d. per lb. Natali, 40 Gray's Inn Road, London.

Water-bed, 42 in. wide, cost 12l. a month since "Chemist," 35 Clifton Road, Maida Vale, W. Two cases St. Marco water; mahogany soda-water stand; 5 gross sprinklers; 7 lbs. gold bronze. Haup, Middleton, Lanes.

850 blue wide-mouth bottles, contents piro. acid spoilt; what offers; packed in boxes of 250. Natali, 40 Gray's Inn Road, London.

Syphons.—About 12 dozen pint syphons, guaranteed working order, price, including cases, 8s. per dozen. Headland, 53 North Street, Brighton.

Compressed-pellet machines for sale.—1 large McFerran with 3 sets of dies, new, 40l.; 1 smaller ditto, with 1 set of dies, new, 15l. For further particulars, apply Sub. X. Y. Z., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

The Chemist and Druggist, 1880 to now; the lot, weekly numbers 1d., monthly numbers 4d.; also printing-press, quantity type, every requisite for printing labels, bills, or circulars, 4l.; cost over 10l.; good as new. Holmes, Chemist, New Southgate, N.

Portable "Eclipse" ruby tent, cost 1l. 15s., good as new, 17s. 6d.; well-made mahogany camera, 34 x 3, with lens, rising front, and dark slide, 9s.; folding dark-room lamp, 1s. 9d.; ditto, 1s. 6d.; collapsible changing-box, cost 20s., 5s.; Hepworth's "Photography for Amateurs," 9d.; "Photography in Nutshell," 6d.; bargains; no approval. Porter, Coleford, Glos.

WANTED.

Recipe suiting good salubre toilet or household speciality; liberal price given. Address, W. Lewis, 7 Bishop's Road, London, W.

French balance counter-scales stamped, fig. 4 Maw's; 8 or 9 feet by 12 or 14 inches counter case or cases, bent or flat, with mahogany slant behind, as Maw's 6, 7, or 25. Eastman, Forest Lane Pharmacy, Stratford.

✠ SHOP FITTERS,
SHOWCASE
MAKERS.

✠ NATALI & CO. ✠

40 CRAY'S INN ROAD, HOLBORN,
LONDON, W.C.

CHEMISTS' SHOP-FITTINGS, SHOWCASES, AND UTENSILS
OF ALL DESCRIPTIONS, NEW AND SECOND-HAND

Chemists commencing, opening Branches, or making alterations, can be fitted throughout immediately, and save 25 per cent. by purchasing from our extensive stock.

TRANSFER AGENCY NOW OPEN. Several good Businesses for Sale and Wanted.

Stock taken, Valuations made, and Sales effected on most reasonable terms.

NO CHARGE FOR REGISTERING BUSINESSES FOR SALE, AND NO CHARGE TO PURCHASERS.

WILLIAM BURTON & SONS, BETHNAL GREEN, LONDON.

Hydrogen Peroxide, Indigo Extract, Soluble Indigo Powder, Orchil, Cudbear, Logwood Extract, Fustic Extract, Aniline Dyes, Fine Lakes for Lithographic Inks, Vermilionettes, Drysalteries.

Sole Agents in United Kingdom and Colonies, excepting Canada, for

The New Bleach, **SODIUM PEROXIDE** (Aluminium Co., Ltd.).

PLATINUM—IRIDIUM

HARD AS STEEL.

CRUCIBLES, LADLES, BOTTLES, SHEETS, WIRE, &c.

Messrs. CROSS & BEVAN report:—"The resistance of the metal to Aqua Regia is remarkable. We found that a strip measuring 36mm. by 12mm., kept immersed in the boiling acid, lost only 0.08 F. % in three hours and 0.3 in 20 hours."

O. BEREND & CO., 61 FORE ST., LONDON, E.C.

JOHN WYETH & BROTHER

MANUFACTURING PHARMACEUTICAL CHEMISTS.

PHILADELPHIA, U.S.A. LONDON, E.C.: 30 SNOW HILL.

We were the **FIRST** to introduce to the Pharmacist and the Medical Profession, a line of

COMPRESSED PILLS (OR POWDERS)

We are the **LARGEST** Manufacturers of this line of products.

The Machinery and appliances connected with our compressing department are Marvels of Perfection and Accuracy, and the Products wonderful in their Accuracy, Beauty, Style of Finish, Ready Solubility, and Permanency. We use only the **PUREST MATERIAL**. The closest attention is given to every detail of manipulation, and the whole process is under the supervision and direction of the highest commercial integrity, thus ensuring the **SUPERIORITY** of our Preparations.

THE RETAIL CHEMIST WILL DO WELL TO NOTE THAT

WYETH'S COMPRESSED PILLS (OR POWDERS)

WYETH'S SUGAR-COATED COMPRESSED PILLS (OR POWDERS)

WYETH'S SOLUBLE COMPRESSED HYPODERMIC DISCS

WYETH'S COMPRESSED OPHTHALMIC DISCS

WYETH'S BEEF JUICE AS WELL AS

WYETH'S DIALYSED IRON

WYETH'S ELIXIR DIGESTIVE FERMENTS

WYETH'S GLYCEROLE CHLORIDE OF IRON

Are being presented to the attention of the Medical Profession by means of personal interviews, samples and literature, and Advertisements in the Medical Journals. They are being prescribed by Physicians and ordered by Hospitals, and should be found in stock in every well-appointed Pharmacy.

NOTE That all Labels of Wyeth's Pharmaceutical Preparations bear the full firm name and address, "JOHN WYETH & BROTHER, PHILADELPHIA, U.S.A.," and the name and address of the Resident Representative, "WILLIAM F. HORTON, 30 Snow Hill, LONDON."

DISTRIBUTING AGENTS HAVE BEEN APPOINTED AS FOLLOWS:

RAIMES, CLARK & CO., Leith Walk, **EDINBURGH.**

JAMES WOOLLEY, SONS & CO., Victoria Bridge, **MANCHESTER.**

GOODALL, BACKHOUSE & CO., **LEEDS.**

F. H. PROSSER & CO., 14 Ethel Street, **BIRMINGHAM.**

Where a full supply of **WYETH'S PHARMACEUTICAL PREPARATIONS** can be obtained on best terms.

CATALOGUES AND PRICE LIST ON APPLICATION TO THE ABOVE, OR TO

WILLIAM F. HORTON, Resident Representative of **JOHN WYETH & BROTHER, 30 SNOW HILL, LONDON, E.C.**

SEASON 1893.

JEWSBURY & BROWN'S, MANCHESTER,
AERATED WATERS and BEVERAGES. Specially prepared
for a first-class Family Trade. Chemists who have not hitherto
sold these Waters are solicited to apply for Prices and Terms.
Trade Lists, sample Counter Bills, and Analytical Reports will
be sent on application. JEWSBURY & BROWN Pay Carriage
on Waters and Returned Empties.

SYPHONS SELTZOGENES



Messrs. J. BARRE JOHNSTONE & CO., 20 Loftus St., Sydney, N.S.W.
Agents for New South Wales, Queensland, and New Zealand.

**SODAWATER
MACHINERY**
AND APPLIANCES
BRATBY & HINCHLIFFE LTD
ANCOATS 146 MINORIES
MANCHESTER & LONDON

81 ROBERTSON STREET, GLASGOW.

PRICES.

SYPHONS ... 1/6 1/8 and 1/10 each.

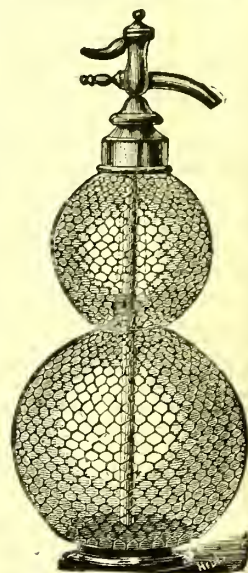
SELTZOGENES.

1	2	3	4	5	8 pint.
6/-	6/8	7/6	8/6	10/5	16/- each.

Including two funnels and stopper for charging.
The tops of these Seltzogenes are made of pure block tin, guaranteed.

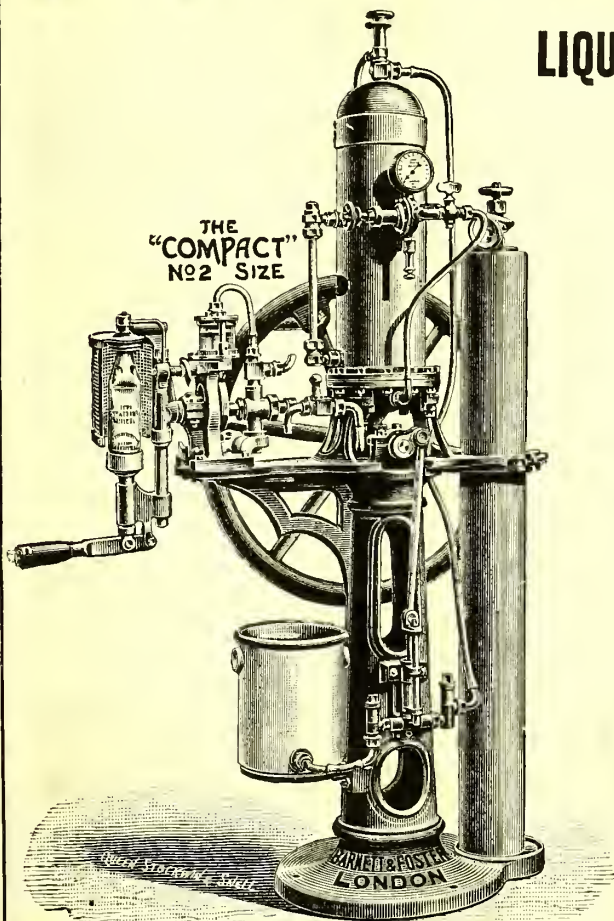
All our Seltzogenes are
manufactured on the well-
known "Fevre" System,
and each one is thoroughly
tested before leaving the
works.

Messrs. NOYES BROS., 43 Queen Street, Melbourne, Victoria,
Agents for Victoria, South and West Australia, and Tasmania.



SODA WATER MAKING

WITH LIQUEFIED CARBONIC ACID GAS.



THE
"COMPACT"
No 2 SIZE

From Mr. A. THOMPSON, M.P.S., 98 High Street, Putney, S.W.

June 11, 1891.

I am more than satisfied with the "Compact" Machine, which answers my utmost requirements. I have nearly trebled my sale this last three weeks.

I find the waters produced by this Machine far better than I have been able to obtain from any one, being much more saturated with the gas, and the Syphons emptying themselves straight off, without shaking.

From Mr. C. F. WYATT, Chemist, Rochester.

December 16, 1892.

Replying to your inquiry as to "Compact" Soda Water Machine I can only say that I am satisfied with it and the work it does in every possible way. The aëration of the water is perfect, and my customers are now highly pleased with the quality of the goods.

I would also add that beyond the renewal of a few washers, no repairs of any kind have been required since I had it, some fifteen months since.

THE No. 2 "COMPACT" Machine (AS SHOWN).

Producing capacity, by hand, 35 dozen per hour.

PRICE £48.

Or, if fitted for steam, 70 dozen per hour (with an extra filling machine).

NOTE.—Any kind of filling machine can be attached to the "Compact" Machines, EITHER for Syphons, Internal Stoppered, Cork, or Screw Bottles.

Iron Vessel containing an average of } 10s.
28 lbs. by weight of Liquefied Gas } each.

And has sufficient Gas to manufacture about 18 gross of highly-charged Soda Water (10-oz. Bottles), or double this quantity of splits.

These Machines occupy little space, and are ready for use immediately! They require no fixing! Are self-contained and produce soda water, lemonade, &c., of the highest class and greatest purity, at a minimum of cost.



THE 'LONDON-MADE' SYPHON (Title Registered).

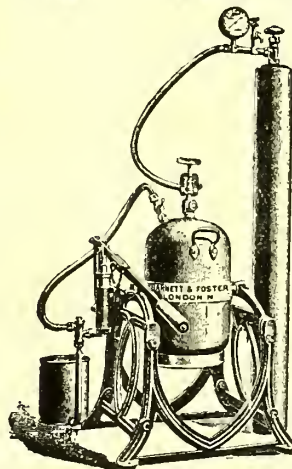
It is the Cheapest, Strongest, Handsomest, and Best in the World.

Pure Block Tin Tops.

PRICE 1/6 EACH.

Nickel-plating Tops from 3d. each.
Silver-plating Tops from 4½d. each.
Marking on Tops Free for orders of 250. Marking on Vases Free for orders of 1,000.

THE PORTABLE CYLINDER



As here shown, is charged with plain filtered water while on the Rocker; the gas from the vessel is then slowly turned on, and the copper cylinder rocked backwards and forwards sharply so as to agitate or mix the water and gas together. When charged to the required pressure (about 110 lbs., shown by the pressure-gauge), it can be removed and attached to the Counter Fountain, or for a filling machine if desired.

Prices.

	£	s.	d.
Six-gallon Tinned Copper Cylinder	5	10	0
Cast-iron Rocker ..	1	2	6
Flexible Pipe, Pressure-gauge, Safety-valve, & Connections ..	3	3	0
If fitted with Pump for pumping the water into the cylinder (and so avoiding waste of gas) extra ..	5	5	0
Prices of larger Cylinders upon application.			

table Cylinder with Pump fitted to Rocker.

ILLUSTRATED CATALOGUE FORWARDED FREE UPON APPLICATION TO

BARNETT & FOSTER, "Niagara Works," LONDON, N.
26th Eagle Wharf Road,

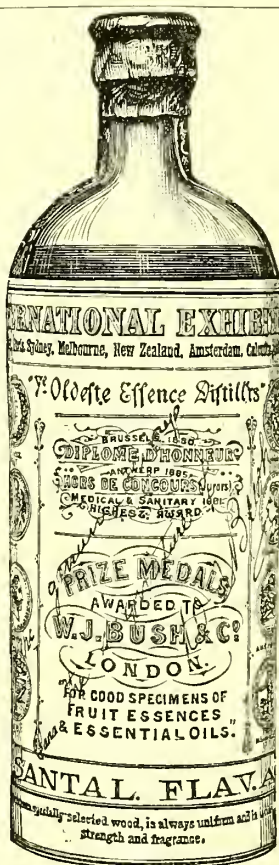
W. J. BUSH & CO.'S

PHARMACOPŒIA

ESSENTIAL OILS

Packed in Original 1-lb. Bottles.

Ol. Anisi Ang.
Ol. Amygd. Essent. Ang.
Ol. Anethi Ang.
Ol. Anthemid. Ang.
Ol. Carui Ang.
Ol. Caryoph. Ang.
Ol. Cinnam. Ver. Ang.
Ol. Copaibæ Ang.
Ol. Coriand. Ang.
Ol. Cubebæ Ang.
Ol. Juniperi Ang.



Ol. Menthæ Pip. Ang.
Ol. Myristicæ Ang.
Ol. Pimentæ Ang.
Ol. Santal. Flav. Ang.

ALL OWN DRAWING.

Ol. Bergamot., Extra
Ol. Eucalypti, Extra
Ol. Lavand. Flor., Extra
Ol. Limonis, Extra
Ol. Rosmar., Extra

DIRECT IMPORTATION.
SPECIALLY SELECTED.

It is imperative that Chemists and others requiring Essential Oils for Medicinal purposes should purchase genuine and finest qualities only. These can only be obtained from W. J. BUSH & CO., who supply them as above, in 1-lb. Bottles, and guarantee their quality and purity. Nearly all Essential Oils offered in the Market are Impure.

W. J. BUSH & CO., MANUFACTURING CHEMISTS,
DRAWERS OF ENGLISH ESSENTIAL OILS,
18 ARTILLERY LANE, LONDON.
Works—ASH GROVE, HACKNEY.

BEFORE BUYING



JAM JARS,

CONFECTIONERY BOTTLES,

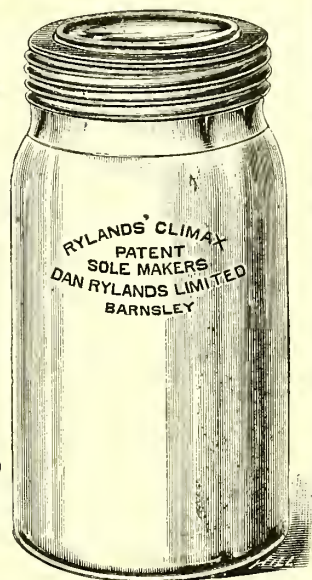
WHOLE FRUIT JARS,

HONEY & MILK JARS,

PICKLE BOTTLES, &c.,

WRITE FOR OUR PRICES & FULL PARTICULARS.

Please state for what purpose required.



 Fresh Fruit can be preserved with its natural flavour all the year round in our Patent Glass Bottles with Airtight Glass Caps.

BETTER THAN EARTHENWARE JARS. NO BROKEN BITS INSIDE.

**FINE NEW CROP OIL OF LEMON
AND ESSENCES SUPPLIED.**

**DAN RYLANDS, LIMITED,
BARNSELY.**

London Offices : 3 Dyer's Buildings, Holborn, London, E.C.

MEADOWCROFTS'

CONCENTRATED SOLUBLE FRUIT

ESSENCES

ARE NOTED

For the Excellent Flavour and Aroma they impart to the beverages prepared with them.

SPECIALITIES.

Sol. Ess. Lemon, double the usual strength.
 „ „ Ginger Ale, double the usual strength.
 „ „ Jamaica Ginger, of great strength.
 „ „ Orange, of great strength.
 „ „ Hop Ale, double strength.
 Foamine, double strength.

STEAM FILLER

We are the makers of what is undoubtedly the very best Steam Filler for Codd's bottles, and it is in constant use by many of the best makers in the country. It is fitted with a perfect Syrup and Water Saving Motion, and we guarantee it to fill perfectly 80 to 100 dozen large bottles per hour with one lad only.

Price £26 net cash, or with Improved Syrup Indicator, 30s. extra.

OVER 100 OF THESE MACHINES ARE IN ACTUAL WORK.

W. MEADOWCROFT & SON,

FRUIT ESSENCE MANUFACTURERS AND AERATED WATER ENGINEERS,

REGENT STREET, BLACKBURN, LANCs.

Also at 50 Robertson Street, Glasgow.

The Chemist & Druggist

SUPPLEMENT.

Businesses Wanted
Businesses for Disposal
Premises to Let
Auction Sales

SATURDAY, JULY 22, 1893.

Partnerships
Situations Vacant
Situations Wanted
Miscellaneous

IMPORTANT ANNOUNCEMENT.

A Copy of the SUPPLEMENT for July 29, 1893, will be sent to at least

11,000 CHEMISTS AND DRUGGISTS IN BUSINESS;

WILL BE GIVEN TO

ANY ASSISTANT WHO APPLIES FOR IT PERSONALLY;

AND WILL BE POSTED TO

ANYONE CONNECTED WITH THE TRADE WHO SENDS A STAMPED ADDRESSED WRAPPER FOR IT.

ADVERTISEMENTS for the Supplement must be received at the Office, 42 Cannon Street, E.C., not later than 5 o'clock on Thursday Evenings, for insertion in the current week's issue.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—£625.—LONDON, S.E.—Dispensing and Retail, with good speciality attached; the returns amount to about £625 yearly; *profitable* good-class trade; well-fitted shop, attractive in appearance, and good stock; comfortable house with garden; price about £550; every investigation.

2.—£650.—LONDON, N.W.—Dispensing and Retail; very good class; returns last year £650; *good profitable business*; single-fronted shop, with good stock all of the best class; good-sized house with private entrance, small garden attached; price to be arranged about value of stock and fixtures.

3.—£1,500.—LONDON.—Central position; very busy locality; good class Dispensing and Retail; returns about £1,500; *very profitable*; handsomely fitted shop; price required between £1,600 and £1,700.

4.—£614.—LONDON, S.W.—Dispensing and Retail business; *very good class*; returns last year £614, increases yearly; double-fronted shop with capital stock; small house; very moderate rental; price about £550, about the value of stock and fixtures.

5.—£600.—LONDON, S.E.—Suburb, within easy distance of the Crystal Palace; Dispensing and Retail; *situate* in good residential neighbourhood; returns last year nearly £600; *profitable*; handsomely-fitted shop, and good stock; house has 6 rooms; Laboratory; private entrance; large garden attached; price £550.

6.—£450.—LONDON, S.W.—Dispensing and Retail and Prescribing Business; *situate* in a busy market neighbourhood; returns £450; *good profitable business*; double-fronted shop, good stock; good-sized house, and small garden; price £350.

7.—£1,100.—LONDON (near).—Dispensing and Light Retail; held by vendor about 9 years; returns nearly £1,100, *profit about half*; several good Proprietaries are included; single-fronted shop, large stock; good 9-roomed house, with small garden; price about £880.

8.—£1,400.—DEVON.—Pretty locality, capital centre; good Dispensing and Retail; returns £1,400; *very good profits*; double-fronted shop and good stock; large house, held on long lease; price £900, for which full value is offered.

9.—£1,400.—NORTHERN TOWN.—Large commercial centre; established business; returns £1,400; easily extended, increasing yearly; full investigation is offered to a *bona-fide* applicant; price about £900.

10.—£800.—SOUTH COAST.—Fashionable town; Dispensing Business; all first-class work; returns nearly £800; increasing; well-fitted shop and ample stock; capital house; price about £700.

11.—£250.—BANKS OF THAMES.—Nucleus; almost unopposed; present returns about £250; has been neglected; good opportunity for a small capitalist; about £200 only required.

12.—£900.—HANTS.—Mixed Retail Drug and Stationery; *profitable business*; returns nearly £900; capital business premises, *situate* in a good position in a good market town; low rental; price about £600.

13.—£1,000.—EASTERN COUNTY.—Capital district for business; *and* established concern; returns £1,000, all good-class Dispensing and Profitable Retail; handsomely-fitted shop, well stocked; house is large and convenient, and has good warehouse accommodation; about £1,000 is required; by valuation if desired.

14.—£350.—KENT.—Retail business, *situate* in close proximity to a large and influential town; population increasing; the returns (£350) can easily be extended by a principal; *profits about half*; house contains ten rooms; very low rental; price £200; capital opening for a beginner.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country. Particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION. Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the special attention of a London Agent.

NOTICE.—Messrs. ORRIDGE & CO. have a large number of Businesses for Sale, suitable for Gentlemen with Small Capital. Full particulars on application.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

F. J. BRETT,

VALUER, LEICESTER,

60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE. NO CHARGE TO BUYERS.

STOCKTAKING UNNECESSARY.—Stocktaking is always dreaded by Chemists, and with a competent Valuer is not necessary.

F. J. BRETT is prepared to estimate or to value entire stocks as they stand with little or no inconvenience to ordinary business, and has repeatedly done so with entire satisfaction to those adopting this mode.

STOCKS AND FIXTURES BOUGHT FOR CASH.

DEVON.—High-class Retail; returns £1,400; fine shop, handsomely fitted; good residence; Patents at Store prices; price £900, value of stock and fixtures. **LANCASHIRE.**—£1,050 returns; good-class trade; in fine position of important town; price £750, or valuation. **SUSSEX.**—Dispensing and Light Retail; returns £530; rent £30; price £400. **YORK.**—£650 returns; General Retail and Prescribing; good thoroughfare; valuation about £300.

MESSRS. BERDOE & CO.

CHEMISTS' TRANSFER AGENTS & VALUERS,

30 JEWRY STREET, ALDGATE, E.C.

Established 1870.

NOTICE TO VENDORS.

Having been for the past 22 years solely engaged in the Sale, Purchase, and Valuation of Chemists' Businesses, we have, as Transfer Agents and Valuers, the largest experience of any in the Trade. VENDORS placing their businesses in our hands for transfer may in all cases rely upon a speedy sale being effected without undue publicity. Terms forwarded post free on application. No sale, no charge.

NO CHARGE TO PURCHASERS

1.—**DEVONSHIRE.**—First-class Light Retail, Dispensing, and Prescribing Business; returns £1,400; moderate rent; good house; satisfactory reasons for leaving; elegantly fitted and heavily stocked; price £900.

2.—**KENT.**—Retail, Dispensing, and Prescribing Business with steadily increasing connection; nothing heavy; returns £2,000; net profit £600; good house, warehouse, and garden; price about £1,750.

3.—**SOMERSET.**—Inland health resort; high-class Dispensing Business; returns £900; capable of being increased in younger hands; splendid position; full prices; price £650; introduction.

4.—**SUFFOLK** (on main line G. E. Railway).—Unopposed Light Retail and Prescribing Business; net profit £350, after paying all expenses; double-fronted shop, well fitted and stocked; rent £30, on lease; convenient house, with splendid garden, well stocked with fruit-trees; price about £600.

5.—**MIDLANDS.**—Good-class Retail, Dispensing, and Prescribing Business; returns £1,100, and making £350 net profit after paying all expenses; good house; valuation of stock and fixtures about £800.

6.—**HOME COUNTY** (20 miles from London).—Light Retail, Dispensing, and Prescribing Business; returns £650, with good profits; low rent; good house and garden; price £450 or offer.

7.—**DEVON.**—Light Retail, Dispensing, and Prescribing Business; returns £500; well situated in principal street; shop well fitted and stocked; good house and garden; valuation about £250.

8.—**ESSEX COAST.**—Unopposed Light Retail and Prescribing Business; splendid position; close to hotels and facing sea; returns £450, can be increased; low rent, good house; price £300.

9.—**LONDON. N.W.**—First-class Retail and Dispensing Business; returns £1,200; net profit £450; satisfactory reasons for selling; low rent; good lease; nice house; price £1,100.

10.—**LONDON. S.W.**—Busy thoroughfare; good-class Light Retail and Dispensing Business; very few patents sold; returns £1,200; net profit £400; price £900; month's trial given.

Messrs. Berdoe & Co., 30 Jewry Street, Aldgate, E.C.

ANDROS & CO.,

Chemists' Transfer Agents & Valuers,

67 SHIP STREET, BRIGHTON,

Invite those desirous of disposing of their Businesses to forward full particulars (in confidence).

NO CHARGE WHATEVER TO PURCHASERS.

WORCESTER.—Light Retail, Dispensing, and Prescribing Business; established nearly 90 years; low rent; owner retiring; price £300.

LONDON SUBURB.—Returns over £400 at good prices; Light Retail, Prescribing, and Dispensing; double-fronted shop, moderate rental; very suitable for energetic beginner; price £350.

MIDLANDS.—Returns £700; very old-established Business; splendidly fitted Pharmacy, large house and garden; close to station; price to immediate purchaser, £500.

LONDON, W.—High-class and old-established Retail, Dispensing, and Prescribing Business, situated in main road; good house, at low rental; returning £620; price £450.

CHESHIRE.—Returns £1,100; General Retail, Prescribing, and Dispensing; large house and attractive pharmacy; old-established; price £800. Messrs. Andros & Co. will forward a list of Genuine Businesses for disposal on receipt of requirements.

CROCKER & CO.

SOLE PROPRIETORS—

Mr. WILLIAM JUDD and Mr. ALFRED MANNERS,

Trade Valuers, Transfer Agents, and Accountants,
15 WALBROOK, E.C.

Having numerous inquiries for good-class Country Businesses they invite communications from intending vendors.

NO CHARGE IS MADE UNLESS A SALE IS EFFECTED.

VALUATION ONLY.—First-class Dispensing Business, in fashionable health resort on the South Coast; splendid opportunity for a young and energetic man to acquire an excellent business upon favourable terms.

LONDON, S.E.—Good-class Family and Dispensing Business; returns £500; price £400; very handsome Pharmacy in select residential locality.

YORKSHIRE (in centre of pleasant market town).—An excellent Family and Dispensing Business; returns £1,250; price £1,100, or valuation terms can be arranged.

HERTS.—Old-established good-class Family Business; returns nearly £650, and capable of great increase; good house and garden; price £450.

NO CHARGE TO PURCHASERS.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

See front page of this Supplement for important announcement concerning next week's issue.

TO Chemists and Druggists.—Stores for Disposal; small fortune to a qualified man; small valuation. Apply, H. C., 4 Priory Terrace, Tonbridge.

A DRUG Business for immediate disposal in South Wales; sale, or exchange for one in London or suburbs; returns over £450. 259/12, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

FOR Disposal, a first-class Chemist and Scientific Business; Chemistry £600, Scientific £200; long lease; good house; garden 100 yards long; price £600, or open to a reasonable offer. A. B., care of Meggeson's, Miles Lane, E.C.

A N unusual opportunity presents itself to those about to open or start a branch; everything complete, including many first-class proprietaries at 25 per cent. under valuation. X. Y. Z., Chemists' Association, Curtain Road, E.C.

CHEMIST'S Business for sale in Leeds; good position; ill-health cause of leaving; price £250; returns £9 a week; no patents; rent £22; splendid opening for duly qualified man. Apply, Hirst, Brooke & Hirst (Limited), Leeds.

RETURNS £500 under good management; could be considerably increased; shop on main road; newly-fitted; double-fronted; plate-glass windows; price at valuation; this is well worth consideration. Apply, Foulston, Chemist, Hull.

£375. YORKSHIRE.—An old-established Business, best position in town; can be made to do £15 per week by a pushing man; satisfactory reasons for sale. Apply, "Galapa," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

NORTH LONDON.—Returns over £1,100; cash price £1,000; first-class position; main street; corner shop; trade Prescribing, Dispensing, and Light Retail; net profits about £450. Address, 237/34, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

NORTHERN CITY.—Returns £1,400; increasing; very few patents; several valuable specialities; capable of great extension under personal supervision; price about £900. Address, "Excelsior," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

£1,500.—Old-established Retail and Dispensing Business, with good Proprietaries; in a desirable locality; easy distance from town; good opening for Dentistry; no agents; only bona-fide purchasers treated with. "Cockle," c/o Sauger's, 2 Whinsley Street, W.

BIRMINGHAM.—For immediate sale, owner leaving the trade; returns are £550; all Light Retail and Prescribing; shop in good position, well fitted and stocked; price £275, or reasonable offer. "Vinolia," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

GENUINE old-established Light Retail Business, showing improving profits; good position; double-fronted corner shop; large town; long lease; good reason for disposing; no agents; price £425. For particulars apply "Chemist," Messrs. Willows, Francis & Butler, 101 High Holborn.

SURREY (about 20 miles from London).—A well-fitted and stocked Light Retail, Dispensing, and Prescribing Business; returns £700; good house, low rent on lease; satisfactory reasons for selling; price £450, or reasonable offer. R. L., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SITUATIONS OPEN—Cont.

WANTED. Junior or Improver, at once, in good-class Dispensing business. Apply, stating salary, &c. (indoors), to 116 Tottenham Court Road, W.

WANTED, at once, a smart Junior; indoors; must be a good worker and counterman; satisfactory references required. Apply, stating age, height, salary required, &c., enclosing photo if possible, to 260/2, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, a registered Chemist, to Dispense for a firm of Surgeons; age betw. 25 and 40; indoors; salary liberal; must write a good hand, and be able to keep books; personal application before 11 morning, and after 6 evening. C. R., 60 Cambridge Gardens, Ladbroke Grove Road, W.

ASSISTANT; about 22; must be of gentlemanly appearance and address, and accustomed to good-class trade; competent to be left in charge occasionally; or a good experienced man requiring time for study entertained. Apply, with full particulars, J. C. Perress, 48 East Street, Brighton.

WANTED, qualified Assistant, at once; one used to Store trade preferred; permanency to a good man; 2 guineas a week and commission, which is from 4s. to 6s. per week; no Sunday duty; also weekly half-holiday; aged about 25 to 35. Apply, with usual particulars, to L. S. D., c/o Ralms & Co., Wholesale Druggists, York.

MANAGER (qualified), for a small business in populous working-class district, London, E.C.; unfurnished apartments will be provided; to a suitable man early succession might be arranged. Send particulars as to previous engagements, &c., to G. A., c/o Hodgkinsons, Treacher & Clarke, 101 Whitecross Street, E.C.

WANTED, at once, a Junior Assistant, for Light Retail and Dispensing; no heavy trade; apprentice kept; no Sunday duty; a smart man with good knowledge of quick cash business will be liberally treated. In reply, state age, height, experience, salary (indoors), and enclose photo, to Major Hill, Chemist, Wisbech.

NATAL.—A qualified Assistant for Durham; aged from 20 to 25; salary, first year, £120, second £140, third £160; bedroom on the premises provided; second-class passage paid out; must be strictly temperate and thoroughly trustworthy. Apply, Export Department, S. Maw, Son & Thompson, 7 to 12 Abbersgate Street.

MANAGER, for good Mixed Country business (Store trade): good Prescriber, Extractor, and Abstainer preferred; hours 8 till 8 (except Saturdays); no Sunday or evening duty. State fully age, height, salary required (indoors preferred), qualification, if married, what family, when disengaged, if abstainer, references, experience, and enclose carte, Griffin, Chemist, Kidderminster.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

See front page of this Supplement for important announcement concerning next week's issue.

JUNIOR; 20; well recommended. Attwell, 74 High Street, Exeter.

AS Junior; Wholesale or Retail; aged 23. A. P., 33 Castle Street Salisbury.

LOCUM-TENENS; 24; good references. Slinn, 116 Abbey Street, Nuneaton.

LOCUM; disengaged till October. Particulars, Mitchell, Brookfield House, Hyde.

PART-TIME or Dispenser: East London. Norman, 43 Durham Road, Manor Park.

DISENGAGED 26th, for 10 weeks; 22; 5 ft. 11 in. "Menthol," 7 Head Street, Colchester.

JUNIOR; 21; 5 years' experience; excellent references. Percy Longley, North Street, Leeds.

JUNIOR; 22; disengaged; 5 years' experience. Richardson, 95 Gillington Road, Bradford, Yorks.

JUNIOR; 21; 6 years' good experience; Dispense and Extract. Wilkes, Willow Street, Ellesmere, Salop.

ASSISTANT; 25; experienced; time for reading. "Chloralamid," 25 Keppel Street, Russell Square.

ASSISTANT; 24; accustomed to Mixed business; Extractor. Smith, 134 Deane Road, Bolton.

LOCUM-TENENS; qualified; Prescriber and Extractor. A. B., Whitford Lodge, Mitcham, Surrey.

JUNIOR; Dispensing experience; highest references; disengaged. Sampson, 11 Chapel Street, Penzance.

JUNIOR; reference excellent. Apply, "Med." Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AS Locum-tenens or permanency; unqualified; disengaged. "Statin," 141 New Lane, Patricroft, Manchester.

ASSISTANT; outdoors; 6 years' experience; good references. "Statin," 18 Sharp Street, Dewsbury.

JUNIOR; aged 21; 6 years' first-class experience; London preferred. A. T., 20 Princes Street, Tunbridge Wells.

ASSISTANT or Dispenser; London preferred; good experience. "Chemist," 30 Harbour Street, Ramsgate.

LOCUM-TENENS; best London experience; Major; disengaged. "Statin," 25 High Street, Hemel Hempstead.

TEMPORARY; disengaged; good references; varied experience; terms moderate. 162 Arkwright Street, Nottingham.

END of August; Southsea or neighbourhood; Junior; 20½; 5 years' (partly London) experience. L., 4 Swiss Terrace, N.W.

JUNIOR; 21; 6 years' experience in Mixed business; height 5 ft. 6 in.; good references. Wheelton, Shorn Villas, Marple, Cheshire.

SITUATION wanted in Wholesale Drug house; 6 years' reference. W. T. B., 10 William Street, Darwin Street, Old Kent Road.

MANAGER, Assistant, or Locum-Tenens; qualified; experienced; aged 37; single. B., c/o Graveur, 22 Basinghall Street, E.C.

AS Assistant or Manager; outdoors; aged 40; qualified; 20 years' varied experience. S. M., 16 West Parade, Newcastle-on-Tyne.

DISPENSING Assistant to Surgeon; Locum or permanent; well experienced. "Senega," 10 Nunhead Crescent, Peckham Rye, S.E.

MANAGER or Senior; aged 35; 20 years' experience; married; qualified; good references. D., 172 South View Road, Sheffield.

ASSISTANT to Chemist or Dispenser to Surgeon; aged 40; moderate salary; outdoor preferred. O. F. W., Post Office, Minton Hummanby, Yorks.

ASSISTANT or Manager, with view to purchase, Dispensing and Light Retail; West of England preferred. "Spec," Highbridge, Somerset.

BRANCH Manager or Locum-Tenens; first-class only; 24; good references; pushing. "Chemicus," 9 Beaumont Crescent, West Kensington.

ASSISTANT; town preferred; good-class London Dispensing experience; aged 23; height 5 ft. 9 in.; indoors. "Sqn.," 244 Vauxhall Bridge Road.

MANAGER; aged 39; qualified; 24 years' experience; understands Photography; good Salesman and Prescriber. W., 38 Marlborough Road, Oxford.

TRAVELLER; aged 26; good connection, South Coast, South and West of England, and Wales; highest reference. L., Westbury-on-Trym, Bristol.

CHEMIST, experienced, open to engagement as Traveller; town or country. 255/36, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WHOLESALE; could undertake management of dry-rooms; knowledge of manufacturing; 7 years' experience. E. H., 46 St. James' Road, Brixton, S.W.

EVENING Employment wanted, from 6 to 10, as Dispenser, or take charge of business. Apply, by letter, Williams, c/o Mr. Jenkins, 2 Eversholt Street, N.W.

GERMAN Assistant, speaking besides his mother-language French and English, seeks situation for 1st October. With. Kerkhof, Pharmacie Rehm, Lausanne, Switzerland.

AS Clerk in Wholesale Drug House; 7½ years' experience, Retail and Wholesale; good references. 253/41, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ASSISTANT, unregistered, desires situation; 20; abstainer; 5 years' London and Melbourne experience; West-end or South of England. James, 404 Essex Road, London, N.

QUALIFIED Assistant (23), seeks an outdoor permanency; first-class Dispensing and Prescribing experience; testimonials; photo. Herbert Smith, Cross Hill, Workington.

SITUATIONS OPEN—Cont.

JUNIOR Assistant, for 2 or 3 months; accustomed to good-class Dispensing business; enclose carte de visite. A. Thresh, Buxton, Derby.

WORCESTER.—Junior Assistant, for Light Retail and Dispensing; 1 only. Apply, with usual particulars, to Mr. Ferneley, 61 The Tything.

WANTED. smart Junior, for a month, outdoors. Full particulars in first letter, Agar Bros, Mansfield. Hours 8 to 7.30, close 1 o'clock Wednesdays.

A QUALIFIED Assistant, for Dispensing business; indoors. Particulars of age, height, experience, salary, with photo, to Park & Smith, Torquay.

WANTED. a Gentleman with good connection, calling upon Druggists, to sell Orange Wine on commission. Apply, Durrant & Co., Railway Street, Hertford.

INVOICE Clerk wanted; must have had experience in the Drug and Patent Medicine trade. State age, salary required, and references to Goodall, Backhouse & Co., Leeds.

WANTED. Assistant, unqualified, for good-class Country business; good references indispensable; indoors. Apply, Steward & Westover, Medical Hall, Kidderminster.

WANTED. a competent Assistant, with experience in Wholesale and Country house. Address, "Wholesale," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SOUTH Coast.—Wanted, an Improver for 2 months, in Light Retail and Dispensing business. Apply, stating age, salary, experience, &c., to W. H. Tompsett, Seaside, Eastbourne.

JUNIOR Assistant (indoors), in good-class Dispensing business, by end of July. Apply, stating age, height, salary required, and photo, Frost & Harrison, 5 Eltham Road, Blackheath, S.E.

ASSISTANT (Minor qualification), for a good-class Dispensing business. Apply, by letter, stating age, experience, references, and salary required, to Kemp, 10 Bedford Terrace, Kensington.

JUNIOR Assistant, accustomed to a Mixed business. Apply, with usual particulars, stating salary required (indoors), and enclosing photo, to Arthur Carlton, Chemist and Druggist, Peterborough.

VIENNA.—An Austrian or German Assistant, speaking English and French, and conversant with English Pharmacy. Apply, with usual particulars, in first instance, to "Parillon," 76 New Bond Street, W.

WANTED. at once, a steady Junior; indoors; no Sunday duty; time for study. Apply, enclosing photo, stating age, height, experience, reference, and salary required, to Wood, 117 Rock Street, Sheffield.

A GOOD Junior for a Light Retail and Dispensing business in a Naval and Military town; easy hours. State usual particulars, C. Williams, Pharmaceutical Chemist, 11 Bush Street, Pembroke Dock, S. Wales.

QUALIFIED Assistant wanted, for a Country trade; hours short and no Sunday duty. Please state particulars as to age, experience, height, &c., together with references, to E. G. Carrington, Chemist, Baweell.

WANTED. qualified Assistant, not over 30; also Junior about 20. Apply, stating age, height, experience, reference, and salary required, enclosing photo, to J. & J. Thompson & Co. (Linn.), 192 Manchester Street, Oldham.

WANTED. 2 Assistants, Senior and Junior, indoors; Junior must not be under 21 years of age. Apply, stating particulars as to salary, experience, &c., to Reece & Co., 53 Great Marylebone Street, Portland Place, W.

WANTED. a qualified Assistant; one used to quick trade preferred. State usual particulars, salary required (outdoors), and send photo (to be returned); permanency to a good man. Webster, Supply Stores, West Bromwich.

TO Chemists.—Wanted, a good and industrious young Welshman used to a good country business and can Dispense; comfortable home. Apply, stating salary expected, with reference, to O. I. Jones, Apothecaries' Hall, Llanrwst.

AN Assistant (indoors) of good experience, for Light Retail Dispensing business; state age, height, experience, and salary required; must be steady and obliging to customers. Apply immediately, Meyler, Chemist, Milford Haven.

GLOUCESTERSHIRE.—Wanted, an Assistant who understands Prescribing, Extracting Teeth, and Agricultural trade. Give full particulars in applying to R. S. Farrer, Waterloo Pharmacy, Stroud. Established 1815.

A QUALIFIED Assistant, in a good London house where several are kept. State age, height, and salary required, with particulars of former engagements, to X. Y. Z., care of Meggeson & Co., Miles Lane, Cannon Street, E.C.

WANTED. by August 1, an elderly competent Assistant, to manage a small Country business for 3 weeks to a month; no Sunday duty. Apply, stating references, experience, and salary (indoors) to T. G., 2 High Street, Bruton, Somerset.

QUALIFIED Assistant wanted, at once, single (indoors), for brisk Mixed Country business. State age, salary required, experience, and enclose photo (to be returned). Address, J. Richardson, Chemist, Hadfield, near Manchester.

A JUNIOR Assistant, about 23, with Minor qualifications. Applicants will kindly forward full particulars as to age, height, salary required, references, &c., enclosing photo (which will be returned), to T. C. Taylor, 20 Long Row, Nottingham.

WHOLESALE.—Wanted, an Assistant, about 25, with laboratory experience, to proceed to South Africa; passage paid out. Apply, by letter, with full particulars, to C. c/o B. G. Lennon & Co. (Limited), 14 Bunnhill Row, London, E.C.

WANTED. an Assistant, of good address and experience, for a Cash business; indoors; 4 kept; the usual early evening each week, and half a holiday every month. Full particulars to Blackham, 675 Holloway Road, Upper Holloway, N.

WANTED. Improver or Junior, in Light Retail Drug business. Apply, with full particulars, stating age, height, salary, references, and photo (to be returned); indoors; Dissenter preferred. Davies, Pharmaceutical Chemist, March, Cambs.

WANTED. a gentlemanly Assistant, for good-class Dispensing business; state age, salary, &c.; send photo (to be returned); also vacancy for well-educated Youth as Apprentice. Apply to A. G. Kenderdine, Oakfield Road Pharmacy, Clifton, Bristol.

BY first week in August, an Assistant; not under 23; an accurate Dispenser, of good address and obliging business habits. Apply, stating age, height, and salary required, with references, enclosing carte (to be returned), to W. J. Barnes, Chemist, Dover.

WANTED. at once, an Assistant, about 23, who requires a little time for study or to attend lectures; must be competent, quick, and obliging. Personal application preferred, or if by letter enclose carte, with full particulars, to Danbury, 390 Walworth Road, S.E.

WANTED. at once, Junior or Improver; indoors; used to brisk Retail; must be of gentlemanly manners and well recommended. Personal application preferred, but if by letter a recent photo must be enclosed, with usual particulars, to Dalsou, Broadway, Manor Park, Essex.

TAYLOR'S DRUG COMPANY (LIMITED) have vacancies in London and the Provinces for smart qualified Chemists; good salary given; reasonable hours and no Sunday duty. Apply, giving references and full particulars, to Secretary, 18 Guildford Street, Leeds.

QUALIFIED Assistant (Minor) wanted, aged about 25; a good Dispenser, accustomed to Retail and Prescribing; one seeking a permanency preferred. State salary, in or out doors, and full particulars, with photo (to be returned), to J. J. Burnett, Chemist, Bishop-ston, Bristol.

A QUALIFIED Assistant, of good address, as Second Counterman in a large quick Retail. State age, salary (outdoors), references (2 last), height, and enclose photo, Wand. Cash Chemist, Leicester. A satisfactory man requiring permanency may look for early advancement.

FLETCHER'S DRUG COMPANY (LIMITED), Rochdale, Hurley, Blackpool, and Buxton, require a qualified Assistant; no Sunday duty; half-holiday weekly. State salary, references, &c. (enclosing photo if convenient), to The Managing Director, 108 Yorkshire Street, Rochdale.

SENIOR Assistant, qualified, wanted, at once; one desiring a permanency, and who can be well recommended, will be liberally treated with. Apply, enclosing photo (if convenient) and usual particulars, to B. Messrs. Sanger & Sons, 2 Winsley Street, Oxford Street, London.

A QUALIFIED Assistant to take Charge of a small Branch (Light Retail) in good town; single; indoors; or a married man (to live on premises) would not be objected to. State salary, and usual particulars, "Hydrogen," c/o Messrs. Wright, Layman & Tunney, 50 Southwark Street, London.

SOUTH AFRICA.—Assistant wanted; Minor qualification preferred; must be correct and careful Dispenser, have good address, and not be afraid of work; three years' engagement; passage paid out. Write, stating full particulars, to "Natal," c/o John Murdoch & Co., 52 Leadenhall Street, London, E.C.

FOR East London Business.—Minor man, to take charge; able to Extract; hours 8 A.M. to 10.30; half-day weekly recreation; no Sunday duty; salary £50 (indoors). Those with reliable references only need apply, enclosing photo and particulars, to Mabyn, 1 King David Lane, Shadwell, E.

HULL AND SCULCOATES DISPENSARY.

WANTED. as and from the 12th day of August next, a Dispenser (non-resident) for the above institution, who must have passed an Examination of the Pharmaceutical Society; salary £80 per annum; hours 9.30 to 5.30; a boy kept to assist. Written applications, stating age, with testimonials as to experience and qualifications, must be sent to the undersigned on or before the 28th instant.
12 Parliament Street, Hull. T. H. WEST, Hon. sec.
14th July, 1893.

BUSINESSES FOR DISPOSAL—Cont.

OLD-ESTABLISHED Business, doing a good-class trade; returns between £600 and £700; good shop and first-class position; owner taking larger concern; easy terms to cash buyer; no agents. Apply, 185/13, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ESSEX.—Death vacancy; Genuine Chemist's and Druggist's Business; old established; returns £700; Mixed Retail, Dispensing, and Prescribing; good position; splendid opening for a good Prescriber; stock and fixtures at valuation; no reasonable offer refused. Apply, J. Myddelton, Gainsborough.

£95 all at (great sacrifice); main road, S.E.; unopposed position; compact, double-fronted shop, well fitted and stocked; low rent; side door, comfortable house; present profits £4 to £5 weekly; easily doubled by good Prescriber. Apply to Day, Thomas & Co., Chemists' Agents, 111 London Wall, City.

£100 (about).—A compact small Business, at a valuation or otherwise, in a healthy town in Bedfordshire; good house and garden; rent £20; would suit a beginner; satisfactory reasons for disposal. Address, "Semper," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

KENT (13 miles from London).—An unopposed Light Retail, Dispensing, and Prescribing Business; returning £500, at very good profits; several good Proprietaries; small, convenient house and nice garden; with good cellars and Drug-room; rent only £21, on lease; water-rate free; owner taking larger concern. "Chemist," Crayford.

OLD-ESTABLISHED and unopposed Retail and Prescribing Business; well-fitted shop and good stock; price about £300; low rent; exceptional chance; in populous neighbourhood; good opening for Dentistry; satisfactory reasons for disposal; no agents. Apply, "Lanes," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

OLD-ESTABLISHED Agricultural and Family Retail, in good market town (Midlands); returns average nearly £600 yearly, and net profit £250, besides which £30 a year is made from insurance agency; price £550; large house, rent moderate; one or two months' introduction given. Messrs. Berloe & Co., 30 Jewry Street, Aldgate, City.

£195.—Prescribing and Retail Business, near London Bridge; profitable class of trade and returning £650 per annum; well stocked and in good working order; upper part let off to a good tenant; investigation allowed, and references to Wholesale houses. Apply, 258/10, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BUCKINGHAMSHIRE. village, main line of rail, easy distance from London; Light Retail and Prescribing Business; returns £350, capable of increase by anyone understanding Agricultural trade; rent and taxes about £30; good house and well-stocked garden; price £175; unusually good chance. "Bucks," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LONDON, S.W.—Exceptional opportunity.—Thoroughly genuine Prescribing, Dispensing, and Light Retail Chemist's Business; profits good; principally ready-money; in centre of private residences; population increasing; Post and Telegraph Office attached, which nearly pays rent; no other chemist within ½-mile. Apply, K., c/o Hearon, Squire & Francis, Southwark Street, E.C.

MESSRS. THOMAS TOMLINSON & SON, 9 New Cannon Street, Manchester, inform their friends that in addition to the Businesses advertised in last week's Supplement, they have an old-established one in the best position in Bury; about £700; this is really an exceptional opportunity. Also one at Clayton-le-Moors, about £130, which they can confidently recommend. No charge to purchasers.

IN the West Riding of Yorkshire; on sale, an old-established Mixed Country Business of over 40 years' standing, in a good and prosperous manufacturing and farming district; in the hands of the present proprietor for 15 years; one with a knowledge of Dentistry would find it a good opportunity; good and satisfactory reasons for giving up business; no opposition; price about £200. Apply, Wm. Clapham, Crosshills, *via* Keighley.

EXCEPTIONAL opportunity; returns £1,100; best position of pleasant market town; excellent opening for General Stores; also good opening for Dental or Veterinary Surgeon, or Medical man; stock and fixtures can be reduced to £500, to be sold together with the very commodious and convenient freehold premises; references required. "Instantan," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

£350.—Light Retail, Dispensing, Prescribing, and Agricultural Business, in small market town, West Midlands, returning now over £570; large house; moderate rent; an excellent opportunity for a persevering and obliging man, as there is very little opposition and the business is steadily increasing; every investigation allowed to bona fide purchaser. "Chloral," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO Chemists and Dentists.—For immediate sale in good market town, South Dorset; old-established business of Chemist and Druggist; double-fronted well-stocked shop in best position, with dwelling-house, stores, stabling, greenhouse, and good garden; excellent opening for Dentist, there being no resident Dentist within 9 miles; rent low; lease may be had; special reasons given for sale; district good and healthy. Apply, "Dorset," 7 Lorne Terrace, Stafford Road, Bournemouth.

BUSINESSES WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

See front page of this Supplement for important announcement concerning next week's issue.

WANTED, good Prescribing Business (South Coast); must bear strict investigation; cash down. Particulars in confidence, to "Chemicus," 15 William Street, Swanmore, Ryde, Isle of Wight.

WANTED at once, a small select Dispensing Business, in healthy good-class neighbourhood; sea-side preferred; could invest £500 or £600. 258/24, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PARTNERSHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

PARTNERSHIP.—Wanted, active business man, with from £500 to £600 in established Essence, Cordial, and Aëratel-water Business, to take place of retiring partner; a profitable and genuine investment. Apply, 256/37, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WHOLESALE Chemist.—Excellent opening in old-established Manufacturing firm for energetic man with good knowledge of the business; moderate capital and references required. Principals only, apply, stating particulars, to Y. Z., c/o Messrs. Reynell & Son, Advertisement Offices, 44 Chancery Lane, W.C.

TO LET.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

CHEMIST'S Shop to Let; established 20 years; busy neighbourhood; good residence; 12 rooms; opposite Bow Church; rent £65; no premium; fixtures at valuation or arrangement. Address, T. Webster, 6 Radpole Road, Fulham.

APPRENTICESHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

See front page of this Supplement for important announcement concerning next week's issue.

VACANCY for an Apprentice in a good-class Dispensing, Family, and Photographic business; must have passed Preliminary or equivalent; time for study and recreation. Cave, Chemist, Southport.

APPRENTICE wanted to Chemists and Druggist's Business, with Stationery combined; short term and low premium. Apply, stating age, references, &c., R. H. Treweek, Chemist and Stationer, Pembroke.

A YOUNG man as Apprentice wanted, immediately, in a good-class Family and Agricultural business; a very moderate premium accepted to fill vacancy at once (indoors). Apply to T. E. B. Blankley, Dispensing Chemist (by Exam.), Market Place, Brigg.

APPRENTICE.—Vacancy occurs for a gentlemanly youth in a good-class business, where he would have an opportunity of learning the business, also Dental Surgery; good home; no Sunday duty; time for study, &c.; moderate premium; references to former pupils. Address, J. Edmunds, Dispensing Chemist and Surgeon-Dentist, Luton, Beds.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

See front page of this Supplement for important announcement concerning next week's issue.

GOOD Junior required; Minor student and ab-stainer preferred; send photo (to be returned). Lasham, Romford.

A T once; Junior; 21; outdoors; for Mixed Retail; no Sunday duty; enclose photo. Apply, Gibson, Barton-on-Trent.

JUNIOR Assistant (unqualified) or Improver. Apply, with full particulars, to W. Pickard, 3 West Kensington Terrace, W.

WANTED, Junior Assistant. Apply personally, or by letter stating full particulars, Thos. McCrindle, High Road, Tottenham, London, N.

SITUATIONS WANTED—Cont.

LOCUM-TENENS; disengaged 22nd. Jelley, 4 Buckingham Street, Fitzroy Square, W.

MANAGER, by day, week, or month; disengaged; qualified. A. B., 69 Adolphus Street, New Cross, S.E.

LABORATORY Assistant or Wholesale Counter; excellent reference. "Norfolk," 105 High Street, Colchester.

QUALIFIED: as Manager or Senior; aged 50; reference; permanency desired. G., 17 Shalton's Street, Folkestone.

TEMPORARY or Manager; qualified; aged 35; disengaged; town or country; Registered Dentist; terms moderate. 4 Cressington Road, Stoke Newington.

MANAGER, Assistant, or Dispenser to Surgeon; Prescribing; Extractor; Prelim.; 15 years' experience. J. Varlow, Sunderland Street, Houghton-le-Spring Fence Houses.

PART-TIME, for board, &c.; studying for Minor; from August; London; experienced Dispenser; capable. 249/33, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TRAVELLER.—Good connection amongst Lancashire grocers and stores; drags and sundries; London experience; faultless references; aged 30. Geo. Pope, Washington Hotel, Liverpool.

AS Junior in Light Retail and Dispensing business; aged 20 years; 4½ years' experience; abstainer; town preferred. Apply to W. H. Round, 23 Cobden Street, Thornaby-on-Tees, Yorkshire.

AS Assistant or Manager, with a view to succession or Partnership; small capital; aged 30; qualified; disengaged; satisfactory references. "Alpha," c/o Mr. Munro, Inverurie, Aberdeenshire.

WHOLESALE or Mixed Retail; long experience in both; accustomed to manage; good Dispenser and Prescriber; no objection to a temporary situation. T. A., 17 Pinn Street, Seaford, Lancs.

MANAGER, or otherwise, in Homœopathic establishment; 16 years' experience; Minor; married; permanency preferred. 227/22, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

FRENCH Assistant, 19 years, 4½ experience, having a good knowledge of English Pharmacy and language and serious references, seeks a situation in France or elsewhere. Gangry, 92 Rue d'Anteuil, Paris.

LOCUM-TENENS: a Manager, of great experience, having about 6 weeks' holiday, is willing to take sole duty while owner away on holiday; terms, £2 and board. "Opal," 2 Winsley Street, Oxford Street.

ENGAGEMENT wanted by qualified Chemist, aged 35, who has had extensive experience in opening and Managing large Store businesses. W. O. L., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AS Manager or Foreman of Manufacturing Department of the Wholesale; well up in Pharmaceutical and Seale Preparations of all kinds, also General Chemicals. Apply, Mr. Cole, 26 Church Street, Horselydown, Rotherhithe.

ADVERTISER, with many years' experience in Laboratory, requires charge of same at home or abroad; well up in the manufacture of Pharmaceutical preparations and fine Chemicals. W., 48 Lansanne Road, Peckham, S.E.

ADVERTISER, many years Manager large high-class Cash business, requires permanent responsible appointment; aged 35; height 5ft. 11in.; undeniable references. "Chemist," 15 King William Street, Greenwich, S.E.

TRAVELLER, town or country, in any branch of the business: 30 years' experience in London and various parts of England, many years on own account; just disposed of business; middle age, active; moderate salary. Z., 1 Denmark Terrace, Gloucester Road, St. Marks, Cheltenham.

ADVERTISER, 24, who has managed Chemist's business successfully for a considerable time, now seeks similar engagement, or would suit Surgeon's Retail; highest reference; unqualified. T., 377 New North Road, Islington, N.

MANAGER; qualified by examination; middle-aged; married; extensive experience in high-class Retail, together with 5 years' Hospital and 3 years' Drug Stores (sole management); good Prescriber; open to re-engagement September 1. W. Murray, Manager, Drug Stores, Market Place, Wednesbury.

AN experienced Chemist is open for re-engagement at Home or Abroad; specialist in confectioners' essences, ethers, and high-class soluble essences, flavored waters, fruit-syrups, &c.; for home and export; experienced analyst, good correspondent, and general business abilities. Apply, F. C. S., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading which can be obtained on application.

See front page of this Supplement for important announcement concerning next week's issue.

SPECIALITE wanted, suitable to advertise. Send full particulars and terms to "Enterprise," c/o *Ourself's Journal*, 115 Fleet Street, London, E.C.

£20 Cash Prizes offered to Retailers of Ivorine Toilet Specialities; goods on sale or return terms. Apply, Bailey's Toilet Company, Bedford.

AGENTS or canvassers wanted everywhere to sell new Medical Book of Prescriptions and Toilet Recipes; price 1s.; specially suitable for provincial pharmacies; will bring in business; send for copy; liberal terms; large profits, no risk. Apply, by letter only, with addressed envelope (no callers), to H. F., 43 New Oxford Street, London, W.C.

A NEW YORK firm, with an established connection amongst the Druggists throughout the United States, have facilities for the further representation of British Manufactures, and solicit correspondence from firms desirous of being represented in their market. Address, A. B., c/o Messrs. C. J. Hewlett & Son, London, E.C.

THE BOTANICAL STUDENT'S SET OF MICROSCOPIC SLIDES,

Illustrating the structure of Stems, Roots, Leaves, the cellular arrangement of Exogenous, Endogenous, and Acrogenous Plants, Nuclei of Cells, Structure of Petals, Anthers, Pollen Grains and Ovary, Stomata, Crustoliths, Raphides, Annular Rings, Spiral, Pitted, Scalariform and Laticiferous Vessels; price complete, in portfolio case, 12s.

Set of 12 of the more important starches, mounted in fluid to exhibit hilum, concentric rings, &c. 10s. 6d. in case.

Post free from EDWIN TERRY, F.R.M.S., 41 Nightingale Lane, Balham, S.W.

PRELIMINARY AND MINOR.

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CHARLES ELSEY (Deceased).

PURSUANT to the Statute 22nd & 23rd Vic. cap. 35, intitled "An Act to further amend the law of property and to relieve Trustees," Notice is hereby given that all Creditors and other persons having any claims or demands upon or against the Estate of Charles Elsey, late of 54 High Street, Maldon, Essex, Chemist and Druggist (who died on the 26th May, 1893, and whose Will was proved in the Principal Registry of the Probate Division of Her Majesty's High Court of Justice on the 1st July, 1893, by Ann Myddelton, one of the Executors herein named), are hereby required to send in writing the particulars of their claims and demands to the undersigned on or before the 6th September, 1893, after which date the said Executor will proceed to distribute the assets of the said deceased amongst the parties entitled thereto, having regard only to the claims of which she shall then have had notice, and she will not be liable for the assets or any part thereof so distributed to any person of whose claim she shall not then have had notice.

Dated this 18th day of July, 1893.

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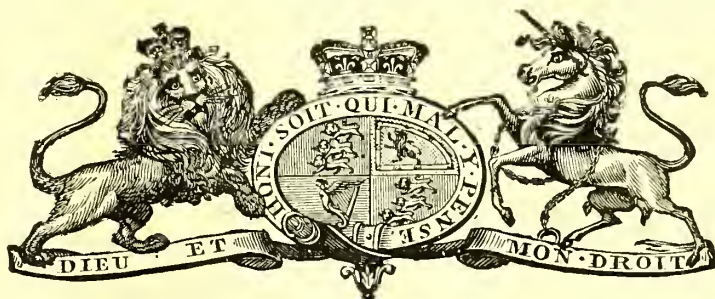
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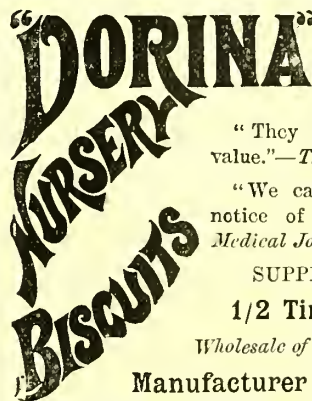
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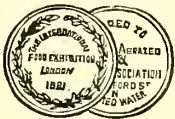
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BRADFORD, 1882.

Year	No. of Members	Dividend
1878	119	None
1879	350	None
1880	430	None
1881	540	None
1882	615	3 $\frac{3}{4}$
1883	708	5
1884	908	6
1885	1,193	6

Year	No. of Members	Dividend
1886	1,463	6
1887	1,612	7 $\frac{1}{2}$
1888	1,892	5
1889	2,031	7 $\frac{1}{2}$
1890	2,088	8 $\frac{3}{4}$
1891	2,134	10
1892	2,312	10 %

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WILLIAM ELBORNE, F.C.S., F.L.S.,

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).
December 15, 1888.

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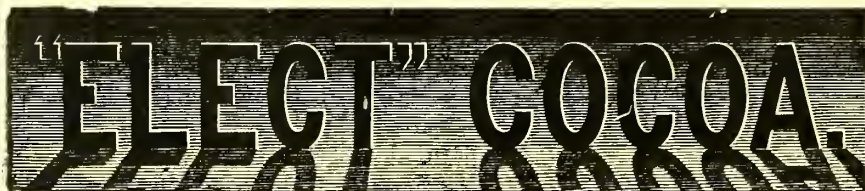
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1d. " " dozen parcels	6/6	..	8/6	12 1/2-Gallon Casks (casks free) each	52/-	..	62/-
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Aloes, all the B.P. combinations		5 gr.	Laxative, Vegetable—		
Aloes, Dilute (Dr. Hall Dianer Pill).....		4 gr.	Res. Podoph.		Ext. Coleo. Co. 1 gr.
Aloes Barb.			Ext. Hyoscy.		Jalapoe
Sapoalis Pulv.			Ext. Tarax, aa		Res. Lepstand, aa 1-2 gr.
Aloes and Nux Vomica—					Ol. Menth. Pip.
Aloes Soc. 1½ gr.			Mercury, Biniodide		1-16 gr.
Ext. Nucis Vom. ½ gr.			Mercury, Proto-iodide		1-20, 1-16, 1-8, 1-4 gr.
Aleoin		7½, ½, ½, 1 gr.	N.B.—Made from the absolutely pure <i>yellow</i> impalpable powder, free from mercury and from biniodide.		
Aloin, various combinations.			So-called "green" proto-iodide contains uncombined mercurry.		
Anti-Dyspepsia (Fethergill)—			Mercury with Chalk.....		1 gr.
Strychnine		½ gr.	Morphine Muriate		1-8, 1-4 gr.
Pulv. Piper Nig. 1½ gr.			Nitro-Glycerine.....		1-200, 1-100, 1-50 gr.
Pulv. Ipecac. 2-3 gr.			Opium		1 gr.
Ext. Gent. 1 gr.			Opium and Camphor.....		1 gr.
Arsenious Acid		1-20, 1-50 gr.	Opil Pulv. 1 gr.		Camphorae
Asafetida, U.S. and B.P.		5 gr.	Pepsin, Pure		1 gr.
Atropine		1-100, 1-300 gr.	Phosphorus		1-100, 1-50, 1-30 gr.
Blue Pill, B.P.		1, 2, 3, 5 gr.	N.B.—In no kind of Pill are the advantages of the "McK. & R." method better exemplified or more in request.		
Blue Pill, with Colecyntn and Hyoscyam.		5 gr.	No other brand of Phosphorus Pills is equally reliable for the administration of the unoxidised medicament.		
Calcium Sulphide		1-10, 1-4, 1-2, 1 gr.	Phosphorus and Iron—		
Calomel, Colecynt., and Hyoso.		5 gr.	Phosphor. Pur. 1-50 gr.		Ferr. Redact..... 2 gr.
Calomel Co., B.P.		5 gr.	Phosphorus, Iron, and Quinine—		
Camphor and Hyoscyam.....		2 gr.	Phosphor. Pur. 1-100 gr.		Ferri Carb. 1 gr.
Camphorae.			Quinine Sulph.....		1 gr.
Ext. Hyoscy., aa		1-4, 1-2 gr.	Phosphorus and Nux Vomica—		
Cannabis Indica		1-4, 1-2 gr.	Phosphor. Pur.....		1-50 gr.
Cascara Sagrada		3 gr.	Ext. Nucis Vom. 1-4 gr.		
Cathartic Comp., U.S.P.			Phosphorus and Quinine—		
Ext. Jalap		1 gr.	Phosphor. Pur.....		1-50 gr.
Ext. Coloc. Co. 1-1-3 gr.			Quinine Sulph.....		1 gr.
Hyd. Subchlor.....		1 gr.	Phosphorus and Valerianate of Zinc—		
Gambo.....		1-4 gr.	Phosphor. Pur.....		1-50 gr.
N.B.—The ready solubility of the "McK. & R." Pills is readily proved by taking a dose of these.			Zinci Valer. 1 gr.		
Colocyntn Comp., B.P.		4, 5 gr.	Picrotoxin		1-80 gr.
Colocyntn, other combinations.			Podophyllin		1-8, 1-4, 1-2 gr.
Copaiba Compound—			Quinine, Bisulphate		1-4, 1-2, 1, 2, 3, 4, 5 gr.
Cubebe Pulv. 2 gr.			Quinine, Sulphate		1-4, 1-2, 1, 2, 3, 4, 5 gr.
Mass. Copaib. 1 gr.			Quinine Co. (Anti-Malarial).		
Tereb. Venet. 1-1-2 gr.			Largely prescribed in America with excellent results.		
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Croton Oil		1-2 gr.	Rhubarb with Blue Pill		5 gr.
Diuretic—			Salicylic Acid		2, 5 gr.
Ext. Buchu, Potass. Nitrat.....		1 gr.	Soap Comp., B.P.		5 gr.
Soillae Pulv.....		1-2 gr.	Squill Comp., B.P.....		5 gr.
Emmenagogue—			Strophanthus		1-20, 1-4 gr.
Ferr. Sulph. Exsic. 1-1-2 gr.			Strychnine		1-50 gr.
Thus, American		1-1-2 gr.	Tonic Laxative (Fothergill)—		
Aloes Socot. 1-2 gr.			Quinine Sulph. 2-3 gr.		Ferri Redact.
Ergotin		3 gr.	Strychn. 1-30 gr.		Ext. Bellad., aa..... 1-4 gr.
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Ipecac. Co. 5 gr.			Zinc Valerianate.....		1 gr.
Ipecac. and Squill, B.P		5 gr.			
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CLASSIFIED LIST OF ALL ADVERTISERS

Whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear in the preceding Index are published in one of the other issues of this month.

ACETIC ACID Fuerst Bros. Lorenz, H. Morris & Callard (Salts)	ALKALOIDS Howards & Sons (Cinchona) Smith, T. H., & Co.	BORAX Howards & Sons Mack's Starch	CAMPHOR Fuerst Bros. Howards & Sons May & Baker, Lim. Morrison, J., & Co. (Comprsd)	CHEST PROTECTORS Chemists' Association, Lim. Hockin, Wilson & Co. Liverpool Patent Lint Co. Newbery, F., & Sons Pattison, G. J. Solport Bros.
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Rowntree & Co.

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French Hygienic Soc.
Stephen Smith & Co. (Hall's)

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Bleasdale & Co.
Burroughs, Wellcome & Co.
Evans, Sons & Co.
Hill, A. S., & Son
Hockin, Wilson & Co.
Robinson & Co.
Smith, T. & H., & Co.
Woolley, Sons & Co.

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Essence)
White, Fairchild & Co.

COLAPSEL TUBES
Betts & Co.

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Burroughs, Wellcome & Co.
Fuerst Bros.
Hooper, B. & Co. | Leo & Co.
Lloyd, T. Howard & Co.

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Lloyd, T. Howard & Co.

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Crawshaw & Co.
Fuerst Brothers
Gibson, R., & Sons
Guest, T., & Co. | Pascall, J.
Southwell, C., & Co.
Warrick Brothers

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Chong, D. | Pattison, G.
Solport Bros.

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Robinson & Co. (Absorbent)
Sanger, J., & Sons

CRSED LINSEED
Mumford, S. G.

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Bronnley, H., & Co.
Dorothy Dentifrice Co.
Hanson, O.

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Quelch, H. C.
Rothershaw & Co.
Stevens, P., & Co.
Sutton, O., & Co.
Thompson & Capper
Warrick Bros. | Wilson, A.
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Brooks, T.
Calvert, F. U., & Co.
Drysdale, J. W., & Co.
Dusseke Bros. & Co.
Eureka Manufacturing Co.
Fletcher Bros. & Co.
Government Sanitary Co.
Grindley & Co. Lim.
Jeyes' Sanitary Compounds Co.
Mackey, Mackey & Co.
Mason, C. E., & Co.
May & Baker, Lim.
National Chemical Co.
Sanitas Co.
Seabury & Johnson
Tyner, T., & Co. (Lim.)
Wandsworth Chemical Works.

DOG MEDICINES
Spratt's Patent, Lim.

DRUGGISTS' SUN.
Ayrton & Saunders
Bailey, M., & Co.
Barclay & Sons, Lim.
Bush, H. W., & Co.
Chemists' Association, Lim.
Chemists' Mineral Water
Association, Lim.
Crowden & Garrod
Evans, Lescher & Webb
Evans, Sons & Co. (Savars)
Fordham, W. B., & Sons, Lim.
Gilbertson, H., & Sons
Hockin, Wilson & Co.
Iris & Co., Lim.
Kay Bros., Lim.
"Lungili" Co.
Maw, S., Son & Thompson
May, Roberts & Co.
Newberry, F., & Sons
Quelch, H. C.
Sanger & Sons
Sanitary Wood-wool Co., Lim.
Schutze & Co.
Marriott, E., & Co.
Tidman & Son | Toogood, W. O.
Tyner Rührer Co.
Warne & Co.
Wood, Vincent | Young, J.

DRUG MILLS
Burroughs, Wellcome & Co.

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Burton, W., & Sons

DYES, &c.
Ayrton & Saunders
Burton, W., & Sons
Crawshaw & Co.
Hatrick & Co., Lim.

EAU DE COLOGNE
Farina, J. M.
Hookin, Wilson & Co. (Farina)
Martin, Maria (Nun)
Moench, Oscar, & Co.
Mulhens, F.

ELECTRIC APPAR.
Darton, F., & Co.
Gent & Co. | Orme & Co.

EMBROCATION
Day & Sons

ENEMAS
Barclays, Lim.
Evans, Sons & Co.
Sanger & Son

ENGRAVERS
Corsan, J. R.

ESSENCES
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Boulton, J., & Co. (Lim.)
Brathly & Hinchcliffe, Lim.
Burgoyne, Burdidge & Co.
Bush, W. J., & Co.
Fletcher, Fletcher & Stevenson
Goodall, Backhouse & Co.
Iris & Co., Lim.
May & Baker, Lim.
Meadowcroft & Son
Newhall & Mason
Rylands, Dan, Lim.
Stevenson & Howell
Tyner, P. (Anchovy)
Tyner, T., & Co.
Woolley, Sons & Co.

ESSENTIAL OILS
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Boehm, Fredk.
Bush, W. J., & Co.
Clay, Dod & Co.
Cooking & Co. (Japan Pepper)
Dodge & Olcott (mint)
Dore, J. H. L.
Evans, Sons & Co.
Hodgkinson, Treacher & Clarke
May & Baker, Lim.
Meadowcroft & Son
Sozio & Andrioli
Stevenson & Howell
Syms & Co.
Treat, R. C.
Vogt, G., & Co.
Warrick Bros.
Witrofsky, E.
Wright, Layman & Umney

ETHER
Duncan, Flockhart & Co.
Howards & Sons
May & Baker, Lim.
Rohlings, J., & Co.
Tyner, T., & Co.
White, A., & Sons
Woolley, Sons & Co.
Wright, Layman & Umney

EUCALYPTUS
Bickford's Bosisto's
Drysdale, J. W., & Co.
Evans, Lescher & Webb
Fletcher, Fletcher & Stevenson
Grimwade, Ridley & Co.
Lushland, Mackay & Baker
Lundwood, J.
Tasmanian Eucalyptus Oil Co.
Vogt, G., & Co.
Woods & Co.

EXALGINE
Kuhn, B.

EXTRACT MEAT
Brand & Co.
Bush's Liquid Beef
Iris & Co. (Viking Co.)
Liebig Co.
Liquor Carnie Co., Lim.
Mason, G., & Co., Lim.
Wyeth, J., & Brother

EXTRACTS, FLUID
Allen & Hanbury
Burgoyne, Burdidge & Co.
Evans, Sons & Co.
Fletcher, Fletcher & Stevenson
Hearon, Squire & Francis
Hooper, B., & Co.
Lloyd, T., Howard & Co.
Moss & Co.
Potter & Clarke
Vogt, G., & Co.
Wright, Layman & Umney

FEED BOTTLES
Burroughs, Wellcome & Co.
(Thermo Safe)
Chemists' Association, Lim.
Evans, Sons & Co.
Hearn, E. A., & Co.
Hockin, Wilson & Co.
Kilner Bros. | Lynch & Co.
Marriott, E., & Co.
May, Roberts & Co.
Maw, S., Son & Thompson
Spence & Co.

FILTERS
Berkefeld Filter Co.
Fordham, W. B., & Sons, Lim.
Mawson Filter Co.
Silicated Carbon Filter Co.
Olison A.

FLY PAPERS
Ford, Shapland & Co.
Strong, Christy
Tunbridge & Wright

FOOD (Infants' & Invalid's)
Allen & Hanbury
Benzer's Food
Brand & Co.
Chinnall, H. B.
Evans, Sons & Co.
Frame Food Co., Lim.
Goodall, Backhouse & Co.
Hearon, Squire & Francis
Iris & Co., Lim.
Liebig Co.
Liquor Carnie Co., Lim.
Lorimer & Co.
Mason & Co., Lim.
Nestlé, H.
Ridke, Dr.
Wyeth, J., & Bro.

FORMULA
Brooks, T.

GINGER ALE
Mills, R. M., & Co.

GLYCERINE
Blyton, Astley & Co. (Pastilles)
Boehm, F., | Fink & Co.
Fuerst Bros.
Greiff, R. W., & Co.
Price's Candle Co., Lim.
Watson & Sons

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MATIC PILLS**
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Eade, G. C.
Prout & Harsant (Blair's)

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Blyton, Astley & Co.
Evans, Sons & Co.
Hearon, Squire & Francis
Lloyd, T. Howard & Co.
Wright, Layman & Umney

GUM
Fluk & Co. (Arabic, &c.)
Levermore, Aug., & Co.

HAIR PREP.
Anglo-American Drug Co.,
Lim.

Cheesbrough Co.
Hockin, Wilson & Co.
Truett, H. P., Lim.

HERBS
Newhall & Mason
Potter & Clarke

HERB BEER EXTS
Newhall & Mason
Potter & Clarke

HOMOEOPATHIO
Epps & Co.
Keene & Ashwell
Leath & Ross
Thompson & Capper
Watson & Wates

HYPHOSPHITES
Duncan Flockhart & Co.
Fellows
Fletcher, Fletcher & Co.
Syms & Co.
Tyner, T., & Co.

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Tver Rubber Co.
Warne, W., & Co.

INHALERS
Burroughs, Wellcome & Co.
Lushland, Mackay & Baker
Krohne & Seemann
Sprone, Co., The
Toogood, W.

INK [See MARKING INKS]
Bewley & Draper

INSECTICIDES
Rocke, Tompsett & Co.
Steiner & Co.

INSURANCE
London and Lancashire Fire
Insurance Co.

IRISH VELS
Warren, A., & J.

KETCHUP
Tyner, P.

KOLA PREPRTN
Christy, T., & Co.

LARD
Ewen, J., & Son

LINT
Liverpool Lint Co.
Maw, S., Son & Thompson
Newson, C. F.
Robinson & Sons

LIQUORICE
Demis Di Luggo & Co.

LITHIA
Fuerst Bros.

LOZENGES
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Blyton, Astley & Co.
Davidson & Gray
Gibson, R., & Sons (Manfrs.)
Hill & Son
Jackson, F.
Raines & Co. | Warrick Bros.

MACHINERY
Bennett, Sons & Shears
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Gardner, W.
Mayfarth, Ph., & Co.
Olison A.
Pinder, J. W.
Strutstraers & Craig (Sifting)
Werner & Pfeiderer (Knead-
ing and Sifting)

MAGNESIA
Bush, W. Son & Co.
Duncan, Fuller & Co.
Evans, Sons & Co.
Greiff, R. W., & Co.
Henry, T., & W. (Calced)
Hill, A. S., & Sons
Washington Chemical Co.

MALT EXTRACT, &c.
Allen & Hanbury
Burroughs, Wellcome & Co.
(Kepler's)
Glendenning, W.
Hearon, Squire & Francis
Montgomery & Co.
Moss, J., & Co.
Raines & Co.
Richardson, John, & Co. (Lei-
cester), Lim.
Robinson & Co.

MARKING INKS
Bond, John (Crystal Palace)
(Ink and Pencils)

MEDICINE CHSTS
Burroughs, Wellcome & Co.
Day, Sons & Hewitt (Veterinary)
Day & Sons (Veterinary)

MENTHOL
Burroughs, Wellcome & Co.
Christy, T., & Co.
Cocking & Co.
Duncan, Fuller & Co.
Evans, Sons & Co.
Hockin, Wilson & Co.
Tyner, P., | Vint, T. D.

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Howards & Sons
May & Baker, Lim.
Tyner, T., & Co.

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Jones & Co.
Phillips, G., & Co.
Smith, S., & Co.
Warren, A., & J.

METHYLENE
Rohlings, J., & Co.

MICROSCOPES
Darton, F., & Co.
Perken, Son & Rayment

MILK
Nestlé, H. (Condensed)

MORPHIA
Macfarlan, J. F., & Co.
Smith, T., & H., & Co.

NATURAL
Hunyadi Janos

MIN. WATER
Hunyadi Janos

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Fox, W., & Sons
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Burgess, E.
Burgess, E., jun.
Burroughs, Wellcome & Co.
(Lanoline)
Cheesbrough Co. (Vaseline)
Christy, T., & Co.
Lloyd, T. Howard & Co.
Richardson, J., & Co. (Leices-
ter), Lim. (Anaspaline)

OPUM
Hopf, R., Co.

OPTICIANS
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Darton, F., & Co.
Perken, Son & Rayment

OTTO OF ROSE
Fuerst Bros.
Witrofsky, J. R.

OXIDE OF ZINC
Hubbuck, T., & Son, Lim.

P. P. P.
Kühn, H. (Dr. Finkler)

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Preserv.)
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Evans, Lescher & Webb
Fassett & Johnson
Fennell (Powders)
Goodall, Backhouse & Co.
Holloway (Pills and Oint.)
Hovenden & Sons
Lalor (Phosphodyne, &c.)
"Lungili" Co.
May, Roberts & Co.
Newberry, F., & Sons
Popular Remedies Mfr. Co.
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Sutton, W., & Co.
Wilson, A. (Bunter's Nervins)

PEPSIN, &c.
Armour & Co.
Burroughs, Wellcome & Co.
Chassaing & Co.
Fletcher, Fletcher & Stevenson
Kühn, B.
Newberry, F., & Sons (Ingluvin)
Stern, G., & G.
Warner & Co. (Ingluvin)

PEPPERMINT OIL
Bush, W. J., & Co.
Cocking & Co.
Stevenson & Howell

**PERFUMERY,
FANCY SOAPS**
Barclay & Sons, Lim.
Bleasdale & Co.
Blondeau & Cie. | Boehm, F.
Blyton, Astley & Co.
Brooks, T. (Solid Perfume)
Burroughs, Wellcome & Co.
Bush, W., & Co.
Chemists' Association, Lim.
Cheesbrough Co.
Evans, Sons & Co.
Ewen, J., & Sons
Farina, J. M.
Hovenden & Sons
Mullens, F.
Newbery, F., & Sons (Berdoes
Pears', A & F., Lim.
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Sandoll & Co.
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Tidman & Son | Treat, R. C.
Truett, H. P., Lim.
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Woolley, Sons & Co. (Powder)
Wright, Layman & Umney

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Burton, W., & Sons
May & Baker, Lim.
Rohlings & Co.

PETROLEUM
Allen & Hanbury
Barclay & Sons, Lim.
Dee Oil Co., Lim.
Fuerst Bros. (Jelly)
Hattrick & Co., Lim.

PHARM. PREPS.
Allen & Hanbury
Armour & Co.
Arthur & Co.
Barron, Harveys & Co.
Boehm, Fredk.
Boehringer, C. F., & Sohne
Boulton, J., & Co., Lim.
Brady & Martin
Bryce & Rumpf
Burgoyne, Burdidge & Co.
Burroughs, Wellcome & Co.
Chassaing & Co.
Deleacre, Ch., & Co.
Duncan, Flockhart & Co.
Ferris & Co.
Fletcher, Fletcher & Co.
Giles, Schacht & Co.
Hearon, Squire & Francis
Hewlett & Son
Howards & Sons
Jeyes' Sanitary Compounds Co.
Keith & Co. (Conc. Finetures)
Lambert Pharmacal Co.
May & Baker, Lim.
Moss, J., & Co.
Potter & Clark
Richardson, John, & Co. (Lei-
cester), Lim.
Smith, T., & H., & Co.
Southall Bros. & Barclay
Sutton, W., & Co.
Syms & Co.
Tyner, P., & Co.
White, Alfred, & Sons
Woolley, Sons & Co.
Wyeth, Jno., & Bro.
Zimmerman, A. & M.

PHOTOGRAPHIC
Artistic Photo Co.
Barclay & Sons, Lim.
Blackfriars Photographic Co.
Boehm, Fredk.
Botwright & Grey
Burroughs, Wellcome & Co.
Dartou, F., & Co.
Fuerst Bros.
Howards & Sons (Chemicals)
Orme, J., & Co.
Perken, Son & Rayment
Tyner, T., & Co.
White, Alfred, & Sons
Zimmerman & Co.

PILLS (Coated, &c.)
Allen & Hanbury
Anderson Apothecaries' Hall
Becham, Thomas
Blyton, Astley & Co.
Bromley, C. (Gout & Rheu.)
Burgess, E.
Burgess, E., jun.
Clay, Dod & Co.
Davidson & Gray
Deacon, H. J.
Dr. Williams
Eade's Gout Pills
Evans, Sons & Co.
Harrowline Pill Co.
Hearon, Squire & Francis
Hill, A. S., & Son (Holloway's)
Lloyd, T. Howard, & Co.
McKesson & Robbins
Newberry, F., & Sons
Richardson, J., & Co., Lim.
Wand, S. (Pearl Coated)
Warner, W. R., & Co. (Coated)
Wyeth, J., & Bro.

PILL MACHINES
Pinder, J. W.
Toogood, W. (Coater)
Werner & Pfeiderer

PLASTERS

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Evans, Sons & Co.
Johnson & Johnson
Seabury & Johnson

PODOPHYLLIN, &c.

Keith, B., & Co. | Smith, T.
Chancellor & Co.

POLISHING

Bradley & Bourdne (Albatum)
Fletcher, Raybould
Fordham, W. B., & Sons, Lim.
Oakley, John, & Sons

PORCELAIN GDS

Toogood (E.C. Pots, regist.)

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Spratt's Patent, Lim.

PRECIP. CHALK

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Mason, A. H., & Son

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Ford, Shapland & Co.
Silverlock, H.
Taylor Bros. | Townsend, J.

PUMILINE

Stern, G. & G.

QUININE SALTS

Böhringer, C. F., & Sohne
Howard & Sons
Zimmermann, A. & M.

RECIPES

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RENNET

Duncan, Flockhart & Co.

RUBBER

Maw, S., Son & Thompson
Tyer Rubber Co.
Victoria Rubber Co.
Warne & Co.

SACCHARIN

Allen & Hanbury
Burroughs Bros.
Burroughs, Wellcome & Co.

SALICIN

Macfarlan & Co.
Smith, T. & H., & Co.

SALICYLIC ACID

Burgoyne, Burdicks & Co.
Fuerst Bros. | Kuhn, B.
Zimmermann, A. & M.

SALT

Stern, G. & G. (Pepsalia)
SAUCES, PICKLES
Goodall, Backhouse & Co.
Mason, G., & Co., Lim.
Tyrer, P.

SCHOOLS, &c.

City School of Chemistry and
Pharmacy, Lim.
Liverpool School of Pharmacy
London Homoeopathic and
Medical School

Manchester College of Pharmacy
Northern School of Pharmacy
Sheffield School of Pharmacy
South London School of
Pharmacy, Lim.

The School of Pharmacy
Westminster College

SCIENTIFIC

INSTRUMENTS

Rose & Co.

SEEDS

Potter & Clarke

SELTZGENES

Brath & Hinchliffe, Lim.
British Syphon Co.
Evans, Sons & Co.
Fordham, W. B., & Sons, Lim.
Geraut, E., & Co.
May, Roberts & Co.

SHAVING

Hovenden & Sons (Euxeele)
Lloyd, Mrs. A. S. (Euxeele)
SHEEP DIP
Fletcher Bros. & Co.
Jeyee's Sanitary Compound Co.
Tomlinson & Hayward
Wandsworth Chemical Works, Lim.

SHOP FITTERS

Bowling & Govier
Bygrave, J. & W.
Howlett, S. | Josephs, P.
Natali & Co. | Natali, E.
Pothie, H., & Co.
Trehle, G., & Co.

SOAP

Ayrton & Saunders
Barclay & Sons, Lim.
Blondeau et Cie. (Vinolia)
Bronnley, H., & Co.
Calvert, P. C., & Co.
Cleaver, F. S., & Son
Cook, E., & Co.
Dodd Bros.
Fordham, W. B., & Sons, Lim.
Jeyee's Sanitary Compound
Muhlens, F.
Peare, A. & F., Lim.
Price, Napoleon, & Co.
Wright, Layman & Umney

SODIUM PEROXID.

Barton, W., & Sons

SPECTACLES

Butterfield & Grey
Dartou, F., & Co.
Perken, Son & Rayment

SPONGES

Presswell Bros. & Schmitz
Evans, Sons & Co.
Peterson, M., & Co.

STAMPS (RUBBER)

Hickinson, J.

STARCH

Chancellor & Co. (Mack's
Critchley (Gloes) [Double])

STOPPERS

Austin & Co. (Sprinkler)
Barnett & Foeter | Melin, C.

STOVES

Clark, S., & Co., Lim.

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Krohne & Seemann
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Powell & Barrett
Quech, H. C.
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Robinson & Sons
Schutze, F., & Co.
Tyer Rubber Co.
Victoria Rubber Co.
Wood, Vincent

SYPHONS

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Brath & Hinchliffe, Lim.
British Syphon Co.
Fordham, W. B., & Sons, Lim.
Idrie & Co., Lim.
Kilner Bros. | Melin, C.

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Fletcher, Fletcher & Stevenson
Idrie & Co., Lim. [(Liquore)]

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Corran, J. R. (Advertising)

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Beecham, T. (Lim.)
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Sutton, O., & Co. (Blook)
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Delacre, Ch., & Co.
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Goodall, Backhouse & Co.
Harker, Stagg & Moran
Hearson, Squire & Fraucie
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Per 1,000,
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Per Small Stopped
Vase with painted
glass label,
5/6.

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21/-.
Per Bottle (Bulk)
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18/6.

No. 180.—Gran. Cath. Co. c. Eucalymin.—Same as "No. 142," except that $\frac{1}{2}$ gr. Eucalymin is used instead of $\frac{1}{2}$ gr. Podophyllin. Prices same as for "No. 142."

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label,
6/4.

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with painted glass
label,
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Mr. ALFRED JOHNSON	Liverpool.
Mr. J. G. JACKSON	Sheffield.
Mr. T. M. LEWIS	Narheth.
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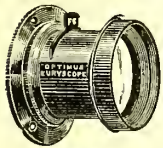
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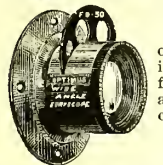
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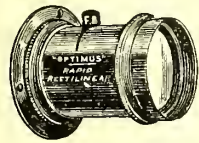
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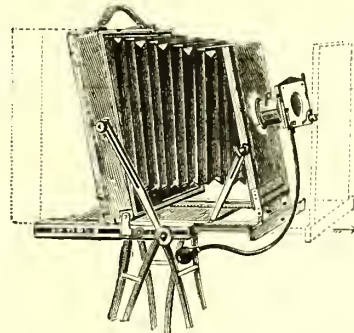
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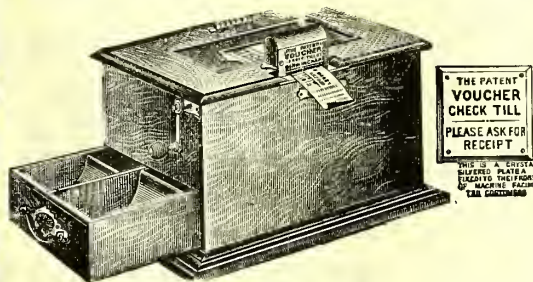
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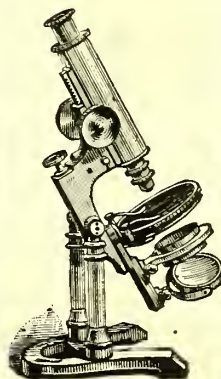
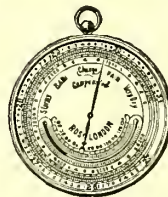
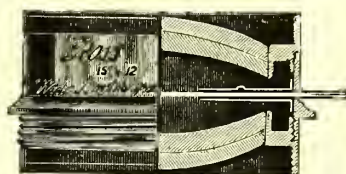
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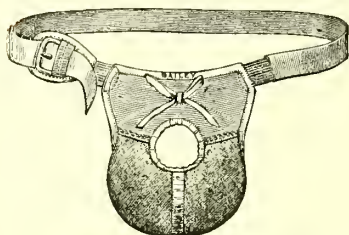


FIG. 1.

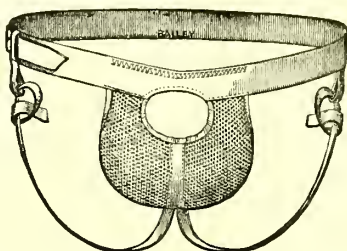


FIG. 2.

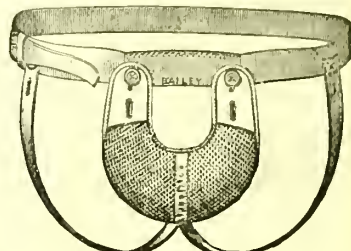


FIG. 3.

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TESTIMONIAL.

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And will be found efficacious in

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None Genuine except such as bear the above Trade Mark "SPIRONE" and the Signature of the Inventor upon the Bottles, on the Label over the Cork, and on the Wrapper.

Retail Price, 4s. 6d. and 11s. per Bottle. Set of Apparatus for Administration, 15s.
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A combination of the nutrients of the best beef with an easily assimilable salt of iron is a favourite tonic, conspicuous among iron preparations in that it does not cause constipation, even when taken by the greatest invalid. Of greatest value to convalescents, and of special use in anæmia, neuralgia, and want of tone generally. May be had with or without quinine.

The *Lancet* reports that it is "a really valuable preparation."

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ZYME PEPTONISING POWDERS (Fairchild) are packed in cork tubes, each containing the required quantities of Zymine and bicarbonate of soda to peptonise a pint of milk or beef tea. Foods peptonised with Zymine are sweet and palatable, are ready for immediate absorption, are soothing and nutritious, and are absolutely indispensable to the proper treatment of gastric and intestinal diseases.

Fairchild Peptonising Powders supplied to the Trade in boxes containing 1 dozen at 14/- per dozen boxes.

DIALYSED IRON (B., W. & CO.).

A pure neutral solution of Iron Peroxide in the colloid form; each fluid ounce contains 27.68 grains.

This preparation does not cause constipation and does not blacken the teeth. The problem of presenting this useful agent in the compressed form has now been solved, and we issue "Tabloids" of Dialysed Iron, each "Tabloid" being equal to 10 mins. of the solution. They dissolve easily and are highly convenient.

"Of its kind a perfect preparation, it is often taken without difficulty when other forms are not well borne. It is the best antidote in cases of acute poisoning by arsenic."—*The Lancet*.

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DIURETIN (KNOLL)

Is Sodio-theobromine-sodio-salicylate, and one of our most powerful diuretics. To produce good results it must be given in large doses, the maximum quantity for one day being 120 gr. Diuretin is not cumulative in its action, so that it can be applied for prolonged periods; acts by direct influence on the secreting parenchyma of the kidneys. It being undesirable to prescribe this remedy in powder on account of absorption of carbon dioxide from the air, "Tabloids" are consequently the best form in which to prescribe it.

Diuretin supplied in 1-oz. bottles, $\frac{4}{4}$ per oz.; quantities of 100 oz. and upwards, $\frac{4}{2}$ per oz. Diuretin "Tabloids," in bottles of 25 and 100, 30/- and 84/- per dozen.

KEPLER MALT EXTRACT.

Kepler Malt Extract contains all the nutrient elements of pure barley, such as phosphates, albuminoids, &c., in conjunction with that peculiarly active substance, diastase, which is concerned in converting the starch of farinaceous products into the more assimilable products. This diastase is a most important principle of the malt, being of special service in errors of nutrition accompanied by digestive derangements. It does not tax digestion, but aids it in its processes, and furnishes warmth-giving, tissue-forming, and force-producing elements. Hence it is of great value in building up the strength of patients prostrated and emaciated by the influenza.

Kepler Extract of Malt supplied to the Trade in $\frac{3}{4}$ -lb. and $1\frac{1}{2}$ -lb. bottles at 20/- and 36/- per dozen. Also in $\frac{1}{2}$ -kilo. and 1-kilo. tins for export only.

KEPLER SOLUTION OF COD-LIVER OIL.

Cod-liver Oil is considered to be of the first importance where nutrition is defective or slow. The plain oil cannot be taken by many people on account of its tendency to produce nausea and vomiting. This trouble has been obviated by the introduction of the Kepler Solution of Cod-liver Oil in Malt Extract. Undoubtedly a very large proportion of oil swallowed is wasted. Cod-liver oil taken plain is invariably found to a large extent in the faeces, but when administered in a finely-divided condition is perfectly assimilated by the patient. The Kepler Solution is palatable and easily digested, consisting of pure extract of malt and the finest Norwegian cod-liver oil only.

Kepler Solution supplied to the Trade in $\frac{3}{4}$ -lb. and $1\frac{1}{2}$ -lb. bottles at 20/- and 36/- per dozen. Also in $\frac{1}{2}$ -kilo. and 1-kilo. tins for export only.

SALOL.

The use of this is very beneficial in the treatment of acute arthritis and chronic rheumatism. Used as a fine powder, it may be employed as an odorous substitute for iodoform, which it equals in activity as an anti-putrescent. Löwenthal has recently discovered Salol to be destructive to the cholera bacillus, acting at the same time as an intestinal antiseptic. Animals inoculated with cholera were restored to good health by early doses of Salol.

Salol has also been used with excellent results as an antiseptic and disinfectant for the bowels in cases of cholera, typhoid fever, &c., the theory being that it destroys the bacillus and prevents putrefaction.

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OUR SUMMER ISSUE.

THE CHEMIST AND DRUGGIST which subscribers and others connected with the trade, to the number of 11,000, will receive next week is to be of a special character all round. It will tell what the English drug-trade is to-day, for we hope to see represented in it every firm that is anxious to do business with

THE ELEVEN THOUSAND BUYERS

to whom we shall distribute the number. There is no other way that business can be so well encouraged as by advertising in THE CHEMIST AND DRUGGIST, and particularly in the perfect trade directory which our Summer Issue will be. The few days which are left before we

CLOSE FOR PRESS

enders it imperative that those who wish to be in the issue should send their copy for advertisements *at once*. Advertisers who make fortnightly or monthly insertions should note whether their advertisements fall to go in next week, and, if not, send instructions to the publisher to make an insertion then. It would be a pity not to have one of a series in the elegant number.

TUESDAY, JULY 25,

the last day we can receive orders or copy for displayed advertisements. Small advertisements for the coloured Supplement *only* will be received up to Thursday, July 27, at 5 P.M., but we would feel obliged if they were sent in as early in the week as possible. It is a hard week for our compositors and printers, and we wish to make it as easy as possible for them.

Summary.

WE regret to report the death, from scarlet fever, of Mr. Harry D. Fuge, Pereira medallist.

MR. SQUIRE discusses the tests for absolute alcohol, and makes some important suggestions.

IN the report of the Chicago Exhibition we comment upon some of the British and French exhibits.

THE Society of Public Analysts met in Dublin this week. We give a succinct report of the proceedings.

WE give a portrait of the late Mr. Joseph S. Lescher, whose career was sketched in last week's issue.

THE public examination in bankruptcy of Mr. Maurice Williams, teacher of chemistry, is reported in this issue.

WE print on page 104 a statement of Mr. H. H. Warner's affairs, which shows that his total liabilities are \$1,046,369.

Truth objects to the medicine-stamp. This is in consequence of an interview with a chemist who had been bitten.

IN an Editorial Note we call attention to some of the factors which are impeding the progress of pharmacy in the United States.

THE names of those who passed the Minor examination in Edinburgh this month are given; 57 per cent. failed, also three Major candidates.

THE Society of Chemical Industry concluded its annual meeting at Liverpool last week by a number of enjoyable and instructive excursions.

OUR correspondents in the opium-markets of Turkey report that this year's opium is of very good quality, but it is arriving somewhat sparingly.

THE Home Secretary has intimated that he has given instructions that proceedings against the parties in the action *Alabone v. Morton* shall be considered.

THE first list of papers promised for the Nottingham Conference comprises a dozen contributions. The titles and authors are named under "English News."

UNDER "Australasian News" we give some interesting items culled from our offshoot there; these include a portrait of a lady who has qualified as a pharmacist in New Zealand.

THE Pharmaceutical Society has recovered three penalties of 5*l.* each from a Ripon wine and spirit merchant, for selling laudanum and chlorodyne, and calling himself a chemist and druggist.

FROM a question put and answered in the House of Commons regarding the income-tax, it will be seen that it is illegal to deduct the amount of the tax paid from business-profits in making the return.

THE Pharmacy Bill, giving hospital pharmacists liberty to sell drugs, has passed the French Chamber of Deputies. The Bill also affects practising pharmacists in other respects, as will be seen from our Paris letter.

THE report of the Chief Inspector of Alkali-works for last year shows that, though the trade is diminishing in volume, it is being carried on more profitably and efficiently. This he attributes to the Alkali Union.

GENERALLY the drug-markets are in a dull state, but, although there is little business, prices are well maintained. This week's drug-sales are exceptionally heavy, and were not finished when we went to press.

A PORTSMOUTH dispenser committed suicide on the journey to Brighton by train. He had taken prussic acid, and also appears to have administered poison to his boy child, travelling along with him, who has died since.

THROUGH the influence of their M.P. the Nottingham chemists have received an important statement from the Board of Inland Revenue regarding the Medicine-stamp Acts. The Board intimate that they are willing to have the Acts amended, and some time ago offered to co-operate with the Pharmaceutical Council to that end.

English News.

The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

Robbing a Chemist.

At the Portsmouth Police Court, last week, George Parfoot, 27, a carman in the employ of Mr. Timothy White, chemist and druggist, &c., of Southsea, was charged with embezzling various sums received by him for goods delivered. He said he was under the impression he had paid the money to the manager. Sentenced to one month's imprisonment.

Spirits of Salt in the Ginger-beer Bottle.

A little boy named Lake, aged 4, living with his parents at Pimlico, found a ginger-beer bottle within his reach. It contained spirits of salt, and had been left by a lodger who had been using some for soldering a kettle. The child drank some and died.

Carbolic-acid Poisoning.

A little girl, Esther Eliza Stout, the 13-year-old daughter of a labourer at Richmond, committed suicide last week by taking a large quantity of carbolic acid. She found her father and mother in a public-house in the afternoon, and asked them to come home, calling her mother "a drunken beast." The father then told her to go home, and threatened to "strap" her. She went home and took the poison.

Society of Chemical Industry.

The members of the Society who visited Liverpool last week had two most enjoyable days' outing. On Thursday parties of 50 to 100 were made up, one visiting Messrs. Cope's tobacco-factory; another Lever's Sunlight soap works; a third Laird's shipbuilding-yard; while a very large party went to Widnes to investigate the manufacture of soda and bleach as carried out by the United Alkali Company at Pilkington's. Amongst other things and places inspected was the Cunarder *Campania*. In the evening, the members dined together in the Adelphi Hotel, under the presidency of Sir John Evans, the retiring President. The toast of the evening, "Success to the Society," was given by Principal Rendall, of University College, and the Chairman replied. Mr. Stanford submitted the toast of "Liverpool," and in responding, along with Mr. Hewitt, of Prescott, for the visitors, Mr. Tyler complimented Dr. Charles Kohn, the local secretary, for much of the success of the meeting.

The visit to Northwich on Friday was under the personal supervision of Mr. Henry Brunner and Dr. Kohn. Some members went by rail, others by water, one party inspecting the Baron's Quay Salt-mine, the other Marston Mine, both belonging to the Salt Union. Both parties afterwards met at Northwich, where Messrs. Brunner, Mond & Co. entertained them to luncheon. At its conclusion, Mr. E. K. Muspratt proposed success and thanks to the Salt Union, and Dr. Perkin similarly thanked Messrs. Brunner, Mond & Co. for the kindness they had shown to the visitors; this being enthusiastically applauded. Mr. Milner responded for the latter.

As a fitting conclusion to the meeting, the members of the Society, on the invitation of the Chairman of the Reform Club (Mr. H. Wade Deacon), who is also a member of the Society, attended a smoking-concert at the club on Friday evening. Mr. Wade Deacon presided, and some sixty or seventy of the members of the Society were present, besides members of the Reform Club. An excellent programme of vocal and instrumental music was provided, and at the conclusion Mr. E. C. C. Stanford on behalf of the Society, thanked the chairman and members of the club for their generous hospitality.

Suicide in a Railway-carriage.

An inquest was held at Brighton, on Saturday last, on the body of John Belcher, aged 36, a chemist's dispenser, who committed suicide in the train from Portsmouth by taking prussic acid. Deceased had been out of work, and on the previous Thursday he took a first-class ticket from Fritton

to Havant, but proceeded to West Brighton, where he was found dead in the carriage, and his boy, aged three, in an apparently dying state. The child was removed to the children's hospital, where he has since died. Verdict—suicide while of unsound mind.

The Income-tax.

In the House of Commons on Monday, Mr. Hanbury asked whether, in arriving at the assessable balance of trading profits liable to income-tax, it was the practice of surveyors of taxes to disallow the deduction from trade expenses of the amount paid as income-tax, or, in other words, that the assessors insisted upon adding to the amount of net profits the amount paid as income-tax, thus taxing taxes as if they were profits instead of a trade loss like all other outgoings incident to the carrying on of trade; whether this practice was in contravention of the Act of Parliament and the rules made thereunder; and whether the decision of the House of Lords last year in the case of "Styles v. the Gresham Life Assurance Company" authoritatively decided the question in a sense adverse to the practice in question.

Sir J. Hibbert: I am advised that there is no authority in the Income-tax Acts for the deduction of the amount paid as income-tax as if it were a trade loss or a trade expense. The practice is not in contravention of the Acts. The Act of 1842 expressly states that only such deductions shall be made as the law expressly enumerates, and there is no provision that I am aware of for making the deduction in question. The case of "Styles v. the Gresham Life Assurance Society" has no bearing on this particular matter.

Mr. Hanbury: Then it is the practice of the Treasury to charge income-tax on income-tax?

Sir J. Hibbert: Yes.

Chemists and the Cholera.

The Greenwich District Board of Works have decided in the event of an outbreak of cholera to employ a number of local chemists to undertake the supply of medicines as ordered by the district medical officers, who will be allotted to different areas, into which the district will be divided for the purpose. Arrangements will be made for speedy disinfection, and for the rapid burial of any who should unfortunately die of the disease. Fifty-six beds will be set apart at the Union Workhouse for the reception of cholera patients.

Alabone v. Morton.

In the House of Commons on Monday, Sir Charles Cameron asked the Secretary of State for the Home Department, whether his attention had been called to the case of Alabone v. Morton, and to the following words in the judgment of Mr. Justice Wright:—"It is to be hoped that the proper authorities will take steps to enforce the Apothecaries Act against both parties, and consider whether proceedings of another kind should be taken against the defendant, whose fraud and false pretences are established by the evidence in this case, so far as that evidence can be relied on." And, whether, considering the nature of the fraud and false pretences referred to by the learned Judge, he would direct the steps recommended by him to be taken.

Mr. Asquith: It is not quite clear whether the Society of Apothecaries intend to use their power in this matter; but I have given instructions that the case shall be laid before the Public Prosecutor with a view to his taking proceedings either independently, or in conjunction with the Society. (Hear, hear.)

A Fatal Draught of Bichromate of Potash.

John Pocknell, a French poli-her, recently residing at Addington Square, Camberwell, had been out of work for some time, and had been in a continuous state of drunkenness. He had got into low water in consequence, and on Sunday morning, July 9, his wife found him crouched behind the door quite dead. It was found that he had drunk a tumblerful of solution of bichromate of potash.

Poisoned by Raw Rhubarb.

A child named Jane Elizabeth Lowes, aged 6 years, the daughter of a butcher at Sunderland, died last week through eating some uncooked rhubarb, which it was conjectured (at the inquest) she might have picked up in the street after it

had been thrown out of some fruit-cart. The doctor said death was due to the irritant poisoning which had been set up by the rhubarb.

The Coal Dispute and the Alkali-trade.

The United Alkali Company have given notice to the workmen and boys in their employ that they cannot find work for them after July 24. This is in consequence of the dispute in the coal industry. It is feared that over 30,000 employes will be affected.

Excursion.

On Thursday, July 6, the managers and assistants of Cook's Drug-stores, Nottingham, accompanied by their wives, had a most enjoyable day's outing through Sherwood Forest and the far-famed Dukeries. Luncheon was provided at Edwinstowe, and a meat tea at Worksop. The trip was made by rail and carriages, and, besides these places, Clumber, Moresby, and Welbeck were visited and explored. Mr. and Mrs. Cook accompanied the party, and everything was provided at Mr. Cook's expense.

Fire.

In the official report concerning the conflagration which raged in St. Mary Axe, E.C., and the adjoining streets on Tuesday morning last, the destruction of Messrs. Curling & Co.'s, wholesale chemists and druggists, of 30 St. Mary Axe, was reported. This report is entirely inaccurate. The flames did actually reach a small portion of the roof of Messrs. Curling's establishment after destroying the adjoining block of warehouses, but beyond breaking a few panes of glass and scorching the rafters little or no damage was done, the attack of the flames being resisted by a strong party-wall. The firm are carrying on business as usual.

Wine-essence Loyalty.

One of the most brilliant illuminations in the provinces on the Royal wedding night was made by Messrs. Newball & Mason, of Nottingham. They laid down a special electric-light plant outside their factory, and with a number of arc lamps of 3,000-candle power each they made a display which was visible for miles round. The arrangements were carried out by Mr. Joseph Blackburn, one of the superintendents under Mr. W. J. Furze, engineer to the firm.

Waiting for the Royal Corns to Grow.

"Well, my good woman, what are you?" asked the Judge of the Marylebone County Court as a comfortable middle-aged lady stepped into the witness-box to explain why she had not paid the instalments of a butcher's bill respecting which the plaintiff had previously obtained a judgment-summons. "I'm a she-ropodist, your Honour," was the reply. "A what?" exclaimed the Judge, looking interrogatively at the lawyer who represented the butcher. "Don't be antological, madam," said the solicitor to the witness. "Of course you are a she-ropodist. You don't suppose his Honour thinks you could be a he-ropodist." "What does all this mean?" asked the bewildered Judge. "I'm a she-ropodist, your Honour," repeated the lady—"a corn-killer." "Oh, I see, a chiropodist. Well, that is a very paying business. Why don't you pay your butcher's bill?" "Business is very slack, sir." "But," said the plaintiff's solicitor, "you say on your leaflets that you are corn-killer to the Crowned Heads of Europe and the aristocracy." "Yes," answered the witness, "but my customers have fallen off lately." "Because"—the answer was given in mournful tones—"I'm too honest: I've killed all their corns." The plaintiff pressed for a commitment, but the Judge was merciful. "No," he said; "I won't make an order. We must give time for the Royal corns to grow again." "Thank your Honour kindly," exclaimed the chiropodist with a profound curtsy, "and I hope that will be soon."

Not Salts and Whisky.

John Edgeley, 40, a Paddington cabdriver, met with an extraordinary death this week. According to his widow's statement at the inquest, he enjoyed good health, but sometimes drank to excess, and had not been doing much work lately. About noon on Tuesday he took home a paper packet and a bottle, which Mrs. Edgeley believed to contain Epsom salts

and whisky. At the request of deceased she mixed him a dose, which he drank. Shortly after she found her husband insensible, and had him removed to St. Mary's Hospital, Paddington, where he died at 2 o'clock. The medical evidence was that he died from the combined effects of spirits of salt and oxalic acid.

The Nottingham Chemists and the Medicine-stamp Acts.

The Nottingham and Notts Chemists' Association have been corresponding with Mr. Smith Wright, M.P., concerning the manner in which the Medicine-stamp Acts are enforced, which they consider to be vexatiously administered. The following letter has been received by the President of the Association, together with a communication from the Board of Inland Revenue:—

House of Commons, July 12, 1893.

(Mr. Fitzhugh.)

DEAR MR. FITZHUGH.—I have to-day received the enclosed letter, addressed to Sir Walter Foster's private secretary by the Board of Inland Revenue, in reply to the representations Sir Walter kindly undertook to make to that Board with regard to the administration of the Medicine-stamp Act at Nottingham, as explained in two letters I received from the Secretary of your Association some weeks ago. I wish personally to express my thanks to Sir Walter for the ready manner in which he took up the question at my request, and I trust the last paragraph of the Inland Revenue letter, stating Mr. Milner's willingness to confer with your Association on any particular points, may lead to some remedy for the grievances complained of. I can quite understand that there must be great difficulties in administering these Acts.

Yours very faithfully,

(Signed) H. SMITH WRIGHT.

The communication enclosed, while stating that in the opinion of the Board there is no just cause of complaint against the manner in which the officers administer the Act, acknowledges that the law is old, making the duty of interpreting it a very difficult and disagreeable one, and the Board will welcome a simpler formula for determining what medicines are liable to stamp duty. The late chairman of the Board invited the Pharmaceutical Society to advise on the amendment of the Act, and the present chairman will be most willing to consider the question with any body or bodies having the authority to speak in the name of the chemists of Great Britain. This being the case, it is hoped the Pharmaceutical Society will take the matter up, and obtain an amendment of this out-of-date Act.

"Truth" on the Medicine-stamp Acts.

The other day (says the editor of *Truth*) I had a conversation with a chemist who had just previously been detected by an emissary of Somerset House in selling a taxable medicine without a stamp. His detection was in this wise:—Just before closing-time a working-man entered the shop and asked for something for his "missus," who was "terrible bad" with rheumatism. "I can't afford more than a shilling," said the proletarian; "have you got anything made up?" An assistant was behind the counter. He did not know that he had anything made up. "What's this?" asked the customer, pointing to a bottle which he had discovered in a glass case, "Won't that do?" The assistant did not know much about it, but thought the mixture might do, and it was bought and sold accordingly. The "working-man" was an emissary of Somerset House, and the next day the assistant's master learned that he had incurred penalties to the amount of about 50*l.* for omitting the three-halfpenny stamp.

Not long since I published a chemist's complaint on this same subject. As the chemist charges the customer with the stamp, he has no reason for not stamping his wares, beyond the desire not to put the price up unnecessarily. But for his own sake he does not want to put stamps on bottles which he is not likely to sell. Now, in this particular case, and I can understand that it is a common one, the chemist happened to have one or two bottles of the particular specific made up, but had no demand for it, and, consequently, had not put stamps on them. Had he sold the stuff himself he would in all probability have remembered the necessity of putting on the stamp. The assistant never gave the matter a thought. The ground for complaint is that the Inland Revenue authorities should lay themselves out to catch tradesmen off their guard. The whole circumstances of the above case

point to the laying of the trap; in fact, it is no better than a case of *agent provocateur*. And this system appears to be habitually employed. A spy makes it his business to look out in chemists' windows or in showcases for some dutiable article without a stamp. He then enters the shop under a disguise and endeavours to purchase the article, selecting a time when the master is out of the way, and when the shopman is not likely to be on the alert. Having secured his prey, he is rewarded by a percentage of the penalty exacted. This is a most detestable system of harrying tradesmen, and ought to be stopped.

I would go further, and abolish the tax on proprietary medicines altogether. It is not worth much from a financial point of view, and there are objections to it both in principle and practice. Apart from the economic objections, it conveys to the ignorant an idea that the articles bearing a stamp are in some way guaranteed or approved by Government, than which nothing can be more mischievous; for many of the compounds thus protected are of a baneful nature, while some are little better than deadly poison. I recommend the tax for repeal in the democratic Budget which we are promised for next year; but, if it cannot be repealed, at least let it be levied with some regard for justice and fair play. It is not a tax on the vendor, but a tax on the consumer, and the vendor ought not to be punished unless he is guilty of deliberately and systematically assisting the consumer to cheat the revenue."

A Jubilee of Agricultural Chemistry.

The jubilee of the Rothamsted Agricultural Experiments will be observed at the Laboratory, Harpenden Common, at 3 P.M. on Saturday, July 29, under the presidency of the President of the Board of Agriculture. A granite memorial has been erected in front of the Rothamsted Laboratory. Addresses of congratulation to Sir John Lawes and Dr. Gilbert will be read on behalf of the subscribers to the Rothamsted Jubilee Fund, and of various societies, including the Royal, Royal Agricultural, Chemical, and Linnæan. Sir John Lawes will also be presented with his portrait, which has been painted by Mr. Hubert Herkomer, R.A., for the subscribers to the Jubilee Fund. Afterwards there will be a reception at Rothamsted by Lady Lawes.

The British Pharmaceutical Conference.

The following are the titles of papers already promised for the Nottingham meeting of the British Pharmaceutical Conference:—

1. "Papain," by Frederick Davis, B.Sc.
2. "Report on Coto-bark (Part I)," by W. Elborne, B.A. (Cantab.).
3. "Examination of Beeswax," by E. J. Parry, B.Sc.
4. "Suggestions for the Standardisation of the Alkaloidal Tinctures of the British Pharmacopœia," by E. H. Farr and R. Wright.
5. "Note on Colloidium Belladonnae," by R. Wright.
6. "Note on Easton's Syrup," by R. Wright.
7. "An Apparatus for Washing and Draining Precipitates out of Contact with Air," by J. A. Forret.
8. A Paper by F. Clowes, D.Sc., F.I.C.
9. "Note on the Specific Gravity of Sandal-wood Oil," by M. Conroy.
10. "The Alkaloidal Value of Conium-fruit," by E. H. Farr and R. Wright.
11. "Effervescent Caffeine Preparation," by Lewis Ough, F.L.S., F.C.S.
12. "Liquid Belladonna Plaster," by W. A. H. Naylor.

Irish News.

Examinations.

Pharmaceutical Assistants' Examination: Mr. H. R. Scott has passed. Registered Druggist Examination: Messrs. W. H. Boyd and T. Purcell have passed.

Sunlight Scap Spoils the Game.

An application from a grocer claiming registration as a druggist, he having been in business and selling poisons prior to the Pharmacy Act coming into operation, was lately received by the Pharmaceutical Society, and documentary evidence of the fact in the form of an invoice from a wholesale dealer was produced, dated 1875; but, unfortunately, the invoice contained a reference to a case of "Sunlight soap,"

and its age and veracity were therefore doubted, and the application refused. It will be news to the proprietors of Sunlight soap to learn that it was sold in Ireland in 1875.

Damages for Poisoning a Horse.

A curious case was heard last week at the Ballyporeen Sessions, in which plaintiff, defendant, and Judge were all of the one name—O'Brien. The plaintiff, a farmer, sued a grocer for compensation for the loss of a horse through the defendant supplying poison in medicine ordered to be given to the horse. A veterinary surgeon gave evidence that the horse's death was the result of the medicine. The sum of 25*l.* was awarded to the plaintiff as compensation. Thomas O'Brien, the defendant, is not registered as a druggist or chemist under the Pharmacy Act.

The Society of Public Analysts

held their annual summer meeting at Dublin on Tuesday, July 18. The theatre of the College of Surgeons was lent for the meeting, and Sir Charles Cameron, analyst for the City of Dublin and President of the Society, was in the chair. Amongst those present were:—Professor Titchborne, Dr. Lapper, Mr. A. H. Allen, Dr. M. A. Adams, Mr. Otto Hehner, Mr. A. Smetham, Dr. F. L. Teed, Mr. James Baynes, Mr. Wallis Jenkins, Dr. S. Roebe, Mr. Rowland Williams, Mr. Macallan, Mr. Francis, and Dr. Bernard Dyer, Hon. Secretary, &c.

Sir Charles Cameron read a paper on "The Results of the Working of the Adulteration Acts in Dublin," in the course of which he said the Act of 1862 is practically inoperative in every place save in Dublin.

He was probably alluding to Irish places only. He gave a number of statistics to show how much more efficiently the Anti-adulteration Acts are carried out in Dublin than in the rest of the United Kingdom. After comparing several of the principal cities, he said the total for the United Kingdom (excluding Dublin), with a population of 3,867,691, was 626 convictions under the Food and Drugs Act and 167 convictions under the Margarine Act; while the figures for Dublin were:—Population, 245,001; prosecutions under the Public Health Act, 3,015; convictions under the Food and Drugs Act, 96, with 10*l.* imposed in fines; and 44 convictions under the Margarine Acts, with 199*l.* 10*s.* imposed in fines. From January 1 of the present year up to July 13 there were in Dublin 62 convictions under the provisions of the Sale of Food and Drugs Act, the fines amounting to 139*l.*; and under the Margarine Act 38 convictions, amounting to 179*l.* 10*s.* in fines; total convictions, 100; total fines, 316*l.* 10*s.*

Among other papers read was one by Professor Titchborne on "Some Recent Improvements in the Babcock Machine" (an instrument for estimating the butter-fat in milk-analyses). The improvement has been patented by Professor Titchborne and Mr. Thompson, and has been adopted by the English manufacturers of the machine. Another paper was by Mr. A. H. Allen, on "Vinegar: its Nature and Manufacture," and others, which were taken as read, were on "Butter," by Mr. Otto Hehner; "A General Method for the Analysis of Oils and Fat," by Mr. H. Droop Richmond; "On the Detection of Heated Cotton-seed oil in Lard," by Mr. W. G. Crook; "On the Estimation of Chlorine in Certain Waters," by Mr. T. Fairley; "Some Simple Appliances for Measuring the Consistency of Semi-solids, with Note on a New Method of Butter-examination," by Mr. C. E. Sohn.

A banquet was held at the Shelbourne Hotel in the evening, amongst the company being the Lord Mayor of Dublin and the Lady Mayoress, Sir William Kaye, C.B., and many other notabilities of Dublin society. In replying to the toast of "The Corporation," which Sir Charles Cameron had given, the Lord Mayor said that about fourteen or fifteen years ago they saddled themselves with a public analyst, and in doing so they had taken on their backs a veritable old man of the sea, for since that time peace and quietness and contentment had left the precincts of the Corporation. Acts of Parliament had been passed in abundance, and new taxes had been imposed on the city, and despite all that they had done fresh sacrifices were called for every year, and when Sir Charles Cameron laid down the law they had only to carry out his will whatever it was, and it was a moot point whether it was wicked or benevolent.

French Pharmaceutical News.

(From our Paris Correspondent.)

HONOURS FOR PHARMACISTS.—On the occasion of the National Fête on July 14, fifteen French pharmacists received decorations. These are about equally divided between the Cross of the Legion of Honour and the Academical Palm, which latter gives the recipient the title of Officer of Public Instruction. These decorations have almost entirely been given to professors in the various schools of pharmacy and medicine in the provinces.

AN ACCIDENT not less serious than the one reported from Paris last week occurred here on Saturday. M. Banz, optician, Quai de Conti, mounted a pair of steps to put a carboy of nitric acid on a shelf in his store-room. He slipped and fell, causing the glass receptacle to break. The vapours from the acid asphyxiated the optician, and an employé, M. Maitrejean, who did his utmost to save M. Banz, became a victim of his devotion, and both died a few hours later.

THE INSPECTION OF PHARMACIES.—Instructions have just been issued to the Prefects of the various Departments, throughout France for the inspection of pharmacies, drug-stores and grocers' shops. On this occasion the inspectors will be required to include in their visits mineral-water sources owned by persons possessing no diploma; also manufactories of seltzer water, which are frequently the object of criticism on the part of doctors. Makers of gingerbread are also to be inspected, as well as dealers in syrups and certain alimentary products. Finally, veterinary surgeons are to be included, and all persons treating domestic animals who keep poisonous substances in their possession.

THE NEW PHARMACY BILL has been before the Chamber of Deputies again, and the amendment proposed by M. Jules Roche, giving the pharmacies attached to hospitals the right to sell medicaments to the public, and thus compete with the legitimate trade, was voted by a majority of 12. The General Association of the Pharmacists of France have again taken the new Bill up energetically. In a recent circular addressed to the pharmaceutical syndicates of the entire country, the Association urged that pressure should be brought to bear on the Deputies from the various districts to ensure the non-passing of amendments likely to be detrimental to pharmacists. This course has not had the desired effect, but as the Bill has still to pass the Senate again, measures will be taken to put the interests and needs of the profession in a proper light, so that the cause of pharmacy is not yet lost. M. Lockroy has kept his promise to withdraw the clause in his Bill which would suppress the diploma of herbalists. This is considered unsatisfactory for pharmacists, and the question will be raised again before the Senate.

THE PARIS RIOTS.—M. Goupil, pharmacien, whose arrest was reported in THE CHEMIST AND DRUGGIST of last week, has been charged before the Eighth Correctional Chamber with insulting the police. A sergeant deposed that when he, with twenty policemen, was endeavouring to clear the street, M. Goupil stood at the door of his shop, apparently in a very excited state. Each time they passed he shouted that they were cows, pigs, and assassins. This he kept up from 5 P.M. to 10 P.M., and on one occasion he menaced the sergeant with a bottle he held. M. Goupil confessed to having spoken the words complained of, but said he did not specially address them to the sergeant. He was unable to resist the indignation he experienced at seeing what was going on in the street. He denied having menaced the witness with a bottle. Among the witnesses, M. Prache, a Municipal Councillor, gave a description of the scene he witnessed from his windows. He hinted that the crowd was excited by "*agents provocateurs*," who cleared away on a signal, and then the police charged. The scene, he said, was terrible—men, women, and children being knocked down and trampled upon. The police struck out with their fists and also used the backs of their sabres. M. Prache concluded by giving M. Goupil an excellent character. Ultimately M. Goupil was condemned to six days' imprisonment, with application of the Béranger (first offenders) Act, and to pay a fine of 200f.

Foreign and Colonial News.

A CHEMIST AS ANARCHIST.—Among the persons recently arrested in Madrid on suspicion of having caused a dynamite explosion at the house of the Spanish Prime Minister, Señor Canovas del Castillo, is a chemist's assistant, one Garcia de la Pedrosa, who is said to be an anarchist.

MANUFACTURING PHARMACEUTICAL GOODS IN RUSSIA.—It is reported, somewhat vaguely, that a syndicate of pharmacists and others proposes to establish, in St. Petersburg, a large laboratory for the manufacture of such pharmaceutical and chemical preparations as have hitherto been imported from abroad.

CHEMICAL-WORKS IN HUNGARY.—A syndicate has requested permission from the Hungarian Minister for Home Affairs to establish a dynamite-factory, in which gun-cotton, sulphuric acid, nitric acid, and other chemicals are likewise to be produced. Another factory with a large share capital has already been established in Budapesth for the manufacture of explosives.

DUTCH MEDICINES IN THE STATES.—The exports of Haarlem oil and similar oils from Amsterdam to the United States represented, in the year ending June 30, 1892, a value of \$13,714. In 1892-93 the value was \$12,117. Of "dyes and drugs" the exports represent an additional value of \$168,837 and \$112,330 respectively, and of "spices" \$200,378 worth found their way to the States in 1891-92 and \$113,606 in 1892-93.

A SHEEP-DIP TENDER.—It is reported from the Cape that, in view of the prevalence of scab in sheep in the colony, an offer has been made by the proprietors of a well-known English dipping-powder to a Commission appointed by the Government to consider the best means of dealing with it, to dip all the sheep in the colony. They ask for compulsory regulations, and they name three years and a quarter as the outside time for the operations. They would provide staff, apparatus, and inspectors. They quote for the job 735,000f.

A NEW NATIVE MEDICAL SCHOOL IN CHINA.—Under the auspices of the Viceroy Li Hung-Chang a medical school will be opened in Tientsin (China) in the course of a few months, where 20 students will acquire a knowledge of foreign medicine and surgery. The school will be connected with a hospital which is now kept up at the expense of the Viceroy and other Chinese officials. This medical school will be established not so much for the benefit of the public at large, who still prefer the native quack, as for the purpose of obtaining a supply of doctors for the fleet, military camps, arsenals, and other Government establishments.

SALE OF POISONS IN INDIA.—A Bombay medical contemporary, referring to the facility with which poisons can be obtained there, urges that immediate steps should be taken to get a Poisons Act and to include within its schedule as many of the known poisons as possible. It is suggested that "the sale of all the poisons under the Act should be so restricted that they could be purchased only under a physician's prescription, unless they be required for *bona fide* trade purposes." This might be a clumsy restriction, but some reform of the regulations in regard to the sale of ardent poisons in India is really necessary, for it is articles such as strychnine and arsenic, produced by refined means, which are used for criminal poisoning, native poisons being less frequently used.

EUCALYPTUS OIL IN INDIA.—Mr. David Hooper some time ago recommended the Madras Government that all the blue-gum oil required for the Medical Store Department should be obtained from Mr. S. G. Wallace's drug-manufactory, Nilgiris, whose Globulus oil is identical with that made in the Government gardens. Mr. Wallace has recently started a laboratory for the manufacture of several drugs. He is said to be an expert, and deserves that encouragement that can be given him by Government. For many years back it has been the object of Government to induce private persons to take up the manufacture of eucalyptus oil on a large scale. Mr. Wallace offers to deliver the oil at 2r. 8a. per lb. free of all charges in Madras.

CHINESE INDUSTRIAL PROGRESS.—China is slowly making progress in the industrial direction. In Tientsin there is a match-factory which, after trying for seven or eight years, has at last succeeded in turning out a very inferior article at a low cost, which suits native requirements, and of which the supply cannot keep pace with the demand. For a couple of years the factory was under the management of a former employé of Bryant & May's, but the establishment is now independent of foreign skill; and the natives seem to have learnt the process very readily. The wood is imported from Corea, the chemicals from England, and the paper and labels from Japan, so that labour is all that Tientsin contributes, but the local product has one advantage over the foreign importation in that it escapes the import duty of 5 per cent. *ad valorem*. These matches are sold retail at the price of about six boxes (each containing eighty matches) for $\frac{3}{4}$ d. There is also, in the same city, Portland cement works (at which, it is unpleasant to learn, work is in full swing seven days a week, 16 hours a day) under English management, and with a large chemical laboratory and assay office in which the minerals from various mines, as well as of the Government, are analysed and assayed under the control of an English expert.

MR. H. H. WARNER'S AFFAIRS.—The schedule of assets and liabilities in the bankruptcy proceedings against Mr. H. H. Warner, the "Safe Cure" man, has just been filed at Rochester, U.S.A. The total indebtedness is shown to be \$1,046,369, of which \$653,027 is secured and \$393,341 unsecured. Of the secured liabilities \$372,000 is indebtedness to the H. H. Warner Company (Limited). The contingent liabilities amount to \$469,108. In these is included the sum of \$275,060, which the attorney of the assignee says Mr. Warner did not expect to be called upon to pay. This reduces the amount of contingent liabilities to \$199,120. This sum is upon Mr. Warner's endorsements, and should he be called upon to pay it, the total amount of imperative liabilities will be \$1,245,489. The nominal value of the assets is \$2,375,022, and the actual, as given by Assignee Hedges, is \$169,911. This does not include any valuation on the stock of the H. H. Warner Company (Limited). The inventory shows how some of Mr. Warner's money has gone. He invested \$191,244 in the Genesee Gold Mining Company, upwards of \$28,000 in the San José Mining and Canal Company, \$57,000 in the Sareno Mining Company, Mexico, and \$121,000 in the Horseshoe Mining Company. The schedule makes no mention of the grape-sugar industry in which Mr. Warner expended upwards of a quarter of a million and which has no present or prospective value. Mr. Warner has issued a circular to his creditors, in which he says:—"In my judgment the most valuable part of my assigned estate is the 34,645 shares of the H. H. Warner Company (Limited). These shares are 10¢ each. Within a year they have sold at \$75 per share, being 150 per cent. of their face value. I have always regarded them as well worth that price. The value of this asset to my creditors necessarily depends upon the future conduct of the business. If it can be managed in the future as it has been in the past, no creditor holding my direct or contingent obligation need lose one penny. Just at the present moment the character of the future management of the company is uncertain. A difference, which is very much to be regretted, has arisen between the Company and myself, growing out of my debt to the Company. Since my assignment, I have been trying to reach an adjustment, but find it impracticable to come to an agreement at this distance from the home-office of the Company in London. I have, therefore, decided to go immediately to London for the purpose of arranging with the Company, if that be possible."

AUSTRALASIAN NEWS.

THE following notes are based upon information contained in the June issue of the *Chemist and Druggist of Australasia*:

FIRE AT A N.S.W. CHEMICAL-WORKS.—The Co-operative Acid and Chemical Manufacturing Company had their works at Alexandria, N.S.W., destroyed by fire on the night of May 16. The company were protected by an insurance policy of 3,500£, and the damage, it was estimated, was nothing

short of this amount. The fire is supposed to have been caused by the upsetting of a kerosene lamp.

STRYCHNINE IN SNAKE-BITE.—Another instance of the value of strychnine in snake-bite is reported from Echuca, where a professional snake-charmer was recently bitten on the finger by one of his subjects, a five-foot tiger snake. In a few minutes the "professor" was seized with tremors, and "a stiff glass of brandy containing his antidote" was administered without effect. He became insensible to Drs. Ecken and Warren, who injected strychnine into his arm, and he shortly recovered.

DANGER FROM BANANAS.—The *Australian Medical Gazette* reports a case of intestinal obstruction of considerable severity which was caused by eating bananas. The patient had eaten two bananas, and shortly afterwards had drunk a couple of glasses of whisky. The symptoms showed themselves first during the following day, and the patient was not seen until another day later. After four days' treatment he was relieved. It is the common belief in Australia that it is very dangerous to drink spirits immediately after eating bananas.

BUSINESS IN N. S. WALES.—Stagnation in trade continues to be the order of the day in N. S. Wales. Wholesale and retail traders are alike complaining, and the number of unemployed chemists' assistants is greater than ever before in the knowledge of the wholesale houses. Though the profit margin on imported proprietaries is not improved, but in some cases lessened by the 10-per-cent. duties, yet the tendency to still further reduce it by cutting prices appears to be gaining ground, and several chemists are going in for cutting largely. The result is that many would much prefer to leave patents alone were it not for the sake of obliging their customers.

FAILURE OF A WELL-KNOWN PHARMACIST.—Mr. T. B. Melhuish, who for many years carried on a pharmacy business in William Street, Sydney, has gone into bankruptcy. The chief creditor is Mr. Groth, and to a less extent Messrs. Elliott Bros. The business has been put under the management of Mr. Connellan, for the creditors, and was offered for sale by tender. The highest received was only for two-fifths of the amount last paid for it; this was refused and the business readvertised. Meanwhile the banking crisis supervened, and the best offer received was from Mr. Connellan, who had previously been the highest tenderer, but now offered 25 per cent. less. The liabilities were put down at 2,784£; assets, 2,367£. The estimated value of the business was—stock-in-trade, 809£; fixtures, goodwill, &c., 550£; book debts, good, 208£; doubtful, 90£; total, 1,595£; but less than half this amount was realised.

RIISING NEW ZEALAND.—New business openings for chemists crop up very suddenly in New Zealand. Mr. R. W. Ind-Carver has opened a pharmacy at Ohingaiti, a township that has sprung up like a mushroom in the route of the Main Trunk Railway from Wellington to Auckland. When the roads, which are in course of construction, are finished, it will be within easy access of Napier, Waikato, Lake Taupo and the Hot Springs. Besides the railway work now going on, there will shortly be some very large contracts for engineering work in the vicinity. The Otara bridge over the Rangitikei River will be a big undertaking, but the proposed viaduct over the Makohine Gorge will be a work of great magnitude, and will give employment to a large body of men for two or three years. Less than five years ago the site of Ohingaiti was untrodden bush, now there is a town, with post-office, police-station, temporary school for one hundred scholars, chemist, temporary churches, &c.

ASSUMING THE TITLE WITHOUT THE STATUS.—A recent decision of Mr. Justice Richmond in what is known as the Blenheim case has shot a hole through the New Zealand Pharmacy Act, by which that structure is likely to be rendered practically useless. The New Zealand Pharmacy Board prosecuted an unqualified person in Blenheim—who had purchased a pharmacy there, and carried on business as "successor to" his qualified predecessor—for infringement of the Pharmacy Act. The judge, in dismissing the case, observed that though the defendant bought out a duly-qualified chemist's business, published advertisements in which he described himself as "successor to" the said qualified

chemist, and undoubtedly carried on the business of a chemist and druggist in an ordinarily well-appointed chemist's shop, these facts did not in law amount to evidence that the defendant had unlawfully assumed the title of a chemist and druggist. The judge found that he had assumed the status of a chemist and druggist, which was not necessarily to assume the title of that status.

THE CRISIS IN QUEENSLAND.—April and May, 1893 (says the Brisbane correspondent of the *C.D.A.*), will be memorable months in Australian history. People were consoling themselves that, the floods being over, good business might be anticipated. Shops were restocked, fittings and furniture renovated, and the heart beating with hopefulness and enterprise. From April 5 to May 16 no less than fourteen banking institutions had "suspended payment pending reconstruction," and of that number ten directly affect the people of Queensland. Land values have depreciated to merely nominal rates, but not without leaving behind them the trail of business immorality and swindling features which are by no means peculiar to Queensland. Pharmacy, too, has been "in the swim." Businesses have been "sold" at valuations which are now startling. The cost of drugs, together with the evils of over-competition, heavy rents, and ridiculous taxes, have hampered or ruined many a promising chemist. The first thing to do in Brisbane is for the fifty chemists to meet and draw lots as to who should be the twenty-five to shut up shop, as it is absolutely impossible for things to assume a prosperous phase whilst so many pharmacies are kept open. Nearly every pharmacist in Queensland has been "touched" by the banking crisis, and I would warn any intending pharmaceutical fortune-hunters to leave Queensland alone, at any rate for five years.

CENSUS OF CHEMISTS IN NEW ZEALAND.—The report on the results of the last census in New Zealand has recently been published in book form, and shows the following results of pharmaceutical interest. The number of medical practitioners registered in the colony is 553, including 70 whose addresses are not known and 102 who have left New Zealand. Medical students numbered 37. There were 58 persons who are grouped in the detailed tables as irregular medical practitioners, including, among others, 3 Chinese doctors, 23 herbalists, 3 medical electricians, 6 medical galvanists, 2 medical specialists, 1 oculist and aurist, and 1 ozonist. Dentists numbered 145, including apprentices, against 99 in 1886. Pharmaceutical chemists and assistants were 530, against 540 at the previous census. The number of midwives, monthly nurses, and sick-nurses was 987, and of veterinary surgeons 55. There are also 512 hospital or asylum officers, nurses, or attendants not elsewhere included. Among 33 others were 1 corn-doctor and 1 hawk of medicines. These are all included under the heading "Health." The section "Science" comprises a motley assortment—viz., 10 analytical chemists, 10 assayers, 5 geologists or mineralogists, 5 naturalists or botanists, 1 anthropologist, 8 phrenologists (3 females), 1 professor of anatomy, 1 writer on entomology, and 21 others. The alphabetical list of occupations mentions that 14 of the 530 chemists are women, but no information is given on the interesting point of the number of employers and assistants. Persons dealing in chemicals and by-products numbered 32 (1 female), including 6 under 20 years of age. Engaged in manufacturing them were 61 males and 7 females, including 24 manufacturing chemists, 12 chemical-manure makers, and 31 others. Four males and 2 females were engaged in the manufacture of surgical instruments and appliances. The Pharmaceutical Register of New Zealand for 1890, which gives the list for December 31, a little more than three months before the date of the census, shows that there were 347 chemists on the Register, including 40 who lived outside the colony, all, of course, being over the age of 21.

AUSTRALIAN v. BRITISH PHARMACY.—In a paper read by Mr. John Benson to the members of the Chemists' Assistants' Institute of Queensland, the author takes a very pessimistic view of the lot of the Australasian pharmacist compared with that of his British brother. Says Mr. Benson: "In Queensland we have twice as many public holidays as at home, but the chemist does not enjoy them. We have as many Sundays in the year, but it is only a mockery to speak of Sunday as the day of rest, for most of the pharmacies are open as much on this as any other day; and for length and number of

business hours, I think Brisbane could lead the world. I cannot see any advantage the colonial chemist has over the one at home, unless possibly the bush pharmacist may be able to put in a just claim. Living in a small centre of population, he has no direct opposition; the hours of duty are reduced to a minimum consistent with the supply of local requirements, and to close the pharmacy for a day or two to go shooting is not out of the way. The prices obtained depend upon the distance from the nearest druggist and the stock of the local storekeepers; but it may be held as a general rule that beyond the bounds of civilisation, where drinks are 1s. each and news a week old is "quite fresh," the chemist's price and profits are nearer the traditional figure than they have ever been before. In such a place the chemist, being a fairly well educated man, is probably next in importance to the publican—(*sic!*)—but it must be remembered that to enjoy all these advantages he will most likely have to live in a district where anything under 100° in the shade is the exception, and fever is a constant companion, or he will have to go out to the 'Never Never' country of the far west, where it only rains occasionally in a lifetime and dust and flies prevail. There is one very wide difference that must not be lost sight of, and that is the pharmacist's financial position. In the old country the name over the door is generally that of the *bona fide* proprietor. In Queensland, and probably in the other colonies, in nine cases out of ten it is not. The so-called proprietor is but a *locum-tenens* for some man who may be 500 miles away, and is liable to be removed at any moment. The Poisons Act we now have in Queensland is worse than useless; that in force at home restricts the storekeeper so much as to improve the position of the chemist. In Victoria and Tasmania they have Acts which prevent storekeepers from selling medicines within a certain radius."

A NEW ZEALAND LADY PHARMACIST.—Our illustration represents Miss Laura Heath, who is a qualified pharmacist as well as a qualified nurse, and who acts as dispenser at the Wellington Hospital. Miss Heath passed the standard



examination of the Board a few years ago. She is a perfect marvel of energy and precision, and does all the work of the dispensary, with the occasional help of another nurse. Several gentlemen who have acted as *locum-tenens* for her at various times, when she has taken her annual holiday, have walked out of the hospital at the end of the month feeling pounds lighter, and wondering "how on earth that slip of a girl did all the work!"

"Do you think a porous plaster can cure him of stuttering?" Doctor: "Yes; when he comes to take it off he will swear right along without stopping."

Pharmaceutical Society of Great Britain.

MINOR EXAMINATIONS IN EDINBURGH.

The following are those who passed this month:—

Anderson, David, Edinburgh	Kerr, Hugh, Edinburgh
Ashworth, Whittaker, Liverpool	Killoh, Alexander, Edinburgh
Bainbridge, Algernon Rupert Cyril, Manchester	Lovett, William Naylor, Edinburgh
Barton, Frederick Keal, Liverpool	McCallum, Alexander Phinister, Leith
Beal, Johnuson, Manchester	McGregor, William John, Elton
Callaway, James Thomas, London	Mitchell, William, Glasgow
Calvert, William, Edinburgh	Moir, David, Edinburgh
Coltman, Thomas Arthur, Manchester	Murray, Adam Porteous, Leith
Coupland, Arthur, Manchester	Nicholson, William, Gateshead
Cram, Newell Burnett, Aberdeen	Noble, John George Barrington, South Shields
Davidson, Walter, Hawick	O'Brien, Edward, Edinburgh
Darling, John Martindale, Edinburgh	Sangster, Charles Edinburgh
Dean, George Saville, Rochdale	Scott, Walter Stanley, Edinburgh
Dryburgh, David, Edinburgh	Sharp, Alexander, Edinburgh
Eunson, James Henry, Edinburgh	Smith, Herbert, Workington
Hogg, Richard, Glasgow	Strawson, Vincent Valentine, Latham, Liverpool
Hewitt, Frederick, Bolton	Thwaites, Alfred, Edinburgh
Holoran, Frank George, Manchester	Welsh, John, Chester
Irons, Thomas Martin, Edinburgh	Whittle, James, Newcastle-on-Tyne
Jack, James, Edinburgh	Wilson, James, Edinburgh

Legal Reports.

PENALTIES UNDER THE PHARMACY ACT.

At the Ripon County Court, on Saturday, before Mr. E. R. Turner, Judge, the Council of the Pharmaceutical Society of Great Britain sued Joseph Topham Verity, of Pateley Bridge, wine and spirit merchant, for having sold chlorodyne and laudanum in his shop, and exhibited the name or title of chemist and druggist, three penalties of 5*l.* being claimed under the Pharmacy Act.

Mr. T. R. Grey appeared for the plaintiffs, and Mr. C. Mellor (instructed by Mr. Atkinson, Bradford and Pateley Bridge) defended.

Mr. Mellor admitted that defendant was not registered under the Pharmacy Act; also that the preparations of opium and morphine came within the meaning of the Act. The defence was that Mr. Verity had a qualified assistant as manager; but Mr. Grey said under the Pharmacy Act the person who kept the open shop must be the qualified person. Mr. Mellor submitted that it was never intended by the Act of Parliament that when a man had taken the precautions defendant had taken he should be brought under the penalties of that Act. According to the decision in the case of the Pharmaceutical Society *v.* The London & Provincial Supply Association, he had only to form himself into a company and he would be perfectly safe so long as he employed a qualified assistant. Judging from the juvenile appearance of many chemists' assistants, he should not think they were all duly qualified. The whole intention of the Act was to prevent any unqualified person carrying on a business of that kind.

His Honour pointed out that there was the express stipulation of "keeping open shop," notwithstanding that there was a duly-qualified assistant. It was proved that defendant kept open a shop for the sale of those poisonous drugs, and it was also shown that he had used the title chemist and druggist, and he did not see what answer could be made. The verdict would be for the plaintiffs for 15*l.*, with costs.

VINEGAR PROSECUTIONS.

ELIZABETH WILSON, carrying on business as a grocer at 4 Canal Street, Bootle, was summoned for selling a pint of vinegar which was not of the substance and quality demanded. On June 20 Inspector Ferguson purchased a sample of vinegar from the defendant's shop, for which he paid two-

pence. The public analyst's certificate showed that the sample was a mixture of acetic acid and water. The defendant stated that she purchased the vinegar direct from the manufacturer, and, therefore, was not aware that it was adulterated. Mr. Cumming (Chief Constable) quoted the Birmingham appeal case (reported in our issue of July 8). The Magistrates, however, dismissed the case, remarking that they would like the "public" to understand that if another case came before them they would treat it severely. They thought it very hard upon the defendant, because she bought the vinegar unknowingly. John Carter, of 204 Marsh Lane, Bootle, who did not appear, was fined 10*s.* and costs for a similar offence.

At the Liverpool City Police Court, on Wednesday, before Mr. Stewart, the Stipendiary Magistrate, John Martin, a grocer, was summoned for selling a fluid which was not of the quality demanded. Inspector Baker stated that on June 16 he bought from the defendant a pint of vinegar. Dr. Brown's certificate stated that the sample contained "upwards of 80 per cent. of diluted acetic acid and vinegar." The defendant's wife, who appeared in answer to the summons, stated that she sold the vinegar as it was supplied to her by the manufacturer. Mr. Stewart: But you are responsible. If I go to your shop and ask for vinegar, and you say it is from the manufacturer, I cannot be supposed to know who the manufacturer is. You are responsible, and you ought to have a guarantee. There is a large quantity of stuff sold as vinegar which is not real vinegar. Defendant was fined 10*s.* and costs.

POOR MILK.—MR. REDWOOD *v.* SOMERSET HOUSE.

MR. REDWOOD, analyst, of Fisher Street, Holborn, gave important evidence in a case before the North London Police Magistrate on Saturday. A milk-carrier in the employ of the Callow Park Dairy Company had been summoned by Inspector Tomlin, of the Middlesex County Council, for selling as pure milk an article from which 8 per cent. of the original fat had been extracted. The defendant denied tampering with the milk, and the manager of the company contended that it was pure, notwithstanding the certificate from Somerset House. It was the custom, the witness said, to send samples of the daily milk to Mr. Redwood as a protection against possibilities. Mr. Redwood now produced his analysis of the milk in question, which showed it to be up to the standard; and he explained the discrepancy between his sample and that taken by the inspector, from the fact that in the hot weather the cream rose more rapidly to the top of the milk than in the cold weather. To keep it of uniform quality the milk required frequent agitation, say with a plunger, or else that which was drawn from the tap at the bottom of the churn was likely to be of a poorer quality than if dipped out of the top. He himself had experimented with a small churn, and found this to be the case. The fact of the milk being trundled about the streets on the perambulator would not in the hot weather be sufficient to keep the cream from rising. The Magistrate (Mr. Lane, Q.C.) said this was evidence quite new to him, but it was important, and could not be resisted when coming from such an expert as Mr. Redwood. The prosecutor said he was bound to be satisfied with the evidence, and Mr. Lane, in dismissing the summons, allowed a guinea costs.

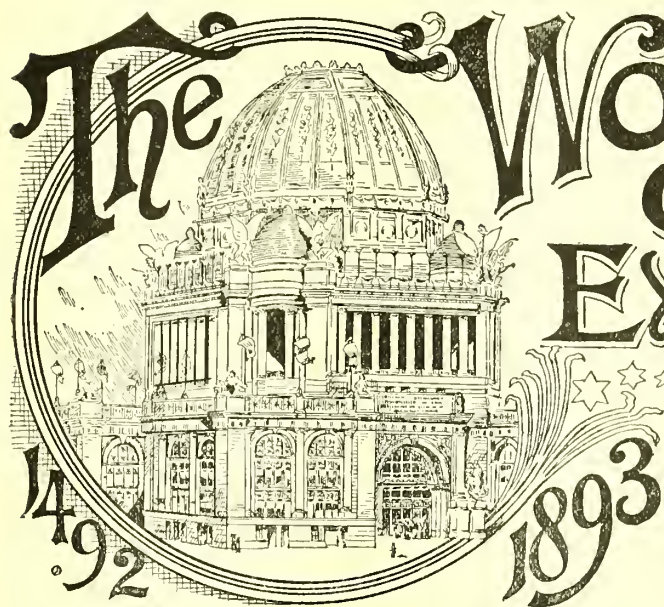
DEED OF ARRANGEMENT.

The following deed of arrangement with creditors has been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1867. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision in the Act making any of these arrangements binding upon dissenting creditors.

Hudson, Samuel, drysalter and dealer in oils and colours, 61 Bilton Street, Wolverhampton. The following are scheduled as creditors:—

	£	s.	d.
Bourne, Johnson & Latimer, London	10	0	0
Wyleys (Limited), Coventry	59	0	0
Belcher, —, Wolverhampton	25	0	0
Wolverhampton and District Money Society ..	16	0	0

The WORLD'S COLUMBIAN EXPOSITION CHICAGO.



ADVERTISING has been carried to startling extremes in the United States. On any journey by rail one sees from the train the roofs of almost every farmer's outhouses protected from rain by the generous sarsaparilla or "castoria" man, who with giant letters has encrusted the bare wood, at the same time hoodwinking us into the belief that "that tired feeling" is "just the same, but cheaper." Moral and wisdom are on the roofs, and the advertisements are not so obtrusive, nor do they spoil picturesque landscapes so dreadfully, as lettered hoardings. There is money in the roofs apparently, and unquestionably they afford advertisers space for display which nothing else in the world can equal.

This prelude has its application to the World's Fair. Few things are so fascinating in artistic disorder and variety as the thirty odd acres of the Manufactures Building, taking it, as most people do, by walking down the Columbian Avenue. There an unequalled feast meets the visitor's eye. Italian art from chisel and brush; Swiss carvings and Norway pine; the quaint Slavonic pavilion of the Russian Court; Belgium's highly artistic porticoes; Doulton's ceramic exhibit, and the Worcester ware and other private pavilions in the British Section; the gorgeous and palatial screen which borders the French exhibits, and in which the most beautiful confections of French millinery are displayed; Germany's iron gates and massive pavilion; the click-click of Waltham automatic watch-making machines, Tiffany's golden palace, and hundreds of American objects, one by one fill the mind with admiration and wonder. Banners and flags, draperies and pictures assist in giving the vastness of the building that fairy fascination which lingers in the memory.

Of course, one could spend months in this building and not exhaust it. So for the benefit of those who wish to take it all in quickly and pleasantly there is nothing better than a trip up the elevator. It is in going up this and looking down from the arrival-platform that we begin to appreciate the advantages of roof-advertising; in thirty seconds we migrate from fairyland to a wilderness of bare roofs. A magnificent scene, undoubtedly, and one which no visitor should miss; but we cannot understand why the Fair promoters have not castoria over this wilderness and turned it into a concession, or arranged to make "that tired feeling" chiefly noticeable when elevator-passengers reach the roof outside. It is a mighty blunder. The pleasure of sitting, the duties of the toilet, the use of the fan, and nearly every need of our existence they have sold to somebody, but no one has been allowed to dot the alphabet in giant letters over the blank spaces which eye the heavens! This is inconsistent, inexplicable. We feel disappointed that the patches of beauty in the space below are contributed by such countries

as France and Germany, and that the United States is one vast congeries of mimic streets packed with painfully uniform and Japanese-roofed houselets. For all that the view is an impressive one, and should be taken early, as well as the last thing before leaving the Fair.

THE BRITISH FOOD SECTION

contains a number of exhibits which are related to pharmacy in various ways. Thus, R. PARKINSON & SONS, chemists, Burnley, make a pretty display of baking, egg, and custard powders, and the BRITISH BEEKEEPERS' ASSOCIATION, 17 King William Street, W.C., have an imposing array of honey in jars, which represents the collective contributions of 100 members of the Association, each of whom sent in from 5 to 50 lbs. of honey. This is displayed uniformly in 1-lb. jars, and there is provided for American investigators an excellent opportunity of recording how differences in food and locality affect the characters of honey, for it goes without saying that no two specimens are strictly the same in appearance and flavour. The exhibits by makers of meat extracts are very good.

BOVRIL (LIMITED)

are about to exploit the United States. Curiously, Bovril was a popular drink in Canada before it was taken up in England, and there is every reason why it should "boom" in the States. It will give those chemists who rely upon the soda-fountain for a living the very thing they need for winter trade. All that they will require to do is to hitch on hot water for aerated water, and let the Bovril-jar take the place of the ice-cream jug, and the tide of nickels will continue to flow rapidly. The Company have the Bovril Castle, in a new dress, on their stand. One side of it is a distributing and exhibiting booth, and the other is a *bov-rill* of trickling water. All the manufactures of the company are displayed on the stand, and it is well looked after by attendants.

COLEMAN & CO. (LIMITED), NORWICH, exhibit a pyramid of "Wincarnis," with attractive show-cards of an invalid lady who is getting well on Liebig's extract of meat and malt-wine.

CROSSE & BLACKWELL (LIMITED)

fall into the same group, but their exhibit is quite different, all sorts of pickles, condiments, vinegars, &c., being shown by them. It is, without question, one of the best sights of the Fair. Their stand is about 30 feet long, and as it occupies a corner of the centre of the building a case has been made to fit the position. The case is made in mahogany, beautifully carved, and the contents are displayed in sections in an exceedingly tasteful manner. The exhibit is attractive, and in some respects it is well that it should be so, for the States consume condiments and preserves largely, especially the latter (which are eaten with a spoon), and their imports from the United Kingdom represent a good item to our manufacturers.

F. KING & CO. (LIMITED), CAMOMILE STREET, E.C., have an exhibit of Edwards's desiccated soup, attended by an American lady, who deserves high praise for the manner in which she brings the merits of her wares under the notice of visitors. America is a poor soup-country, few knowing the art of making soups, and there is an opening for Edwards's article in the restaurants as well as amongst the people.

THE VIKING FOOD COMPANY

are the only English firm who make in the Exhibition a feature of invalid specialities. Beef jellies, extracts, and other highly-nourishing delicacies, with turtle and other soups, are the principal items in their case.

A EUCALYPTUS TROPHY.

A citron-scented corner of the Agricultural Building is the site of a remarkable trophy erected by Ingham's Eucalyptus-oil Company of Rockhampton, which, with the exception of the specimens of eucalyptus oil in Stevenson & Howell's and Burroughs, Wellcome & Co.'s cases, is the only exhibit of the kind in the English section. It has unique features—emus, kangaroos, opossums, &c., upon a huge eucalyptus wart, giving it a popular attraction which would have been impossible otherwise. The wart was found growing on a citron-scented eucalyptus near Rockhampton, and Mr. Ingham has made it the centrepiece of the trophy. It is 20 feet in circum-

are collected by a tribe of aboriginals, amongst others, and this is said to be the first time that the aboriginals have assisted in such an industry.

THOMAS J. LIPTON

is the principal exhibitor of tea, and he has certainly done his part well, for on a quadrangular space of nearly 1,000 square feet he has made a most effective display, showing by means of photographs the various stages through which the leaf goes in his factories at Ceylon, and also how the tea is exported to England, and how put up for the market. Apart from that, specimens are given of the different grades of tea, as well as specimens of coffee and of coffee-essence. The exhibit represents a considerable outlay, and should it be followed up by energetic commercial push in the States there will be some hope of getting a cup of good "English tea" there. Most of the tea used is Japanese, or green; as weak as water, lacking flavour, and scented to a nauseous degree. Perhaps this may account for the fact that tea is not a popular article of dietary in the States, coffee being an accompaniment of every meal. At all events, there is plenty of room for showing our American cousins what a cup of really good tea is, and at the various Ceylon pavilions, which are now in full swing, visitors have the opportunity of getting afternoon tea in English style for the trifling charge of 5 cents.

IN THE DEPARTMENT OF HORTICULTURE

the only English exhibits which interest us are of lime-juice by ALEXANDER RIDDLE & Co. and LAUCHLAN, ROSE & Co. Sauces and condiments are exhibited by the BIRMINGHAM VINEGAR-BREWERY COMPANY (LIMITED), by JOSEPH EDMUNDS, of Barnsbury, N., and by several Indian houses. All these exhibits are displayed nicely, and the same may be said of the handsome exhibit of mustard by KEEN, ROBINSON & BELLVILLE.

CLARKE'S PYRAMID AND FAIRY LIGHT COMPANY (LIMITED), OF CRICKLEWOOD,

have their manufactures displayed in the Pharmaceutical section, and at the time of writing Mr. Clarke was in Chicago on business intent. The exhibit is chiefly devoted to fairy lamps and lights, and the designer of it has succeeded in bringing together a typical selection of lamps, which are displayed harmoniously. Bronchitis-kettles and food-warmers are also shown.

QUIBELL BROTHERS, OF NEWARK-ON-TRENT,

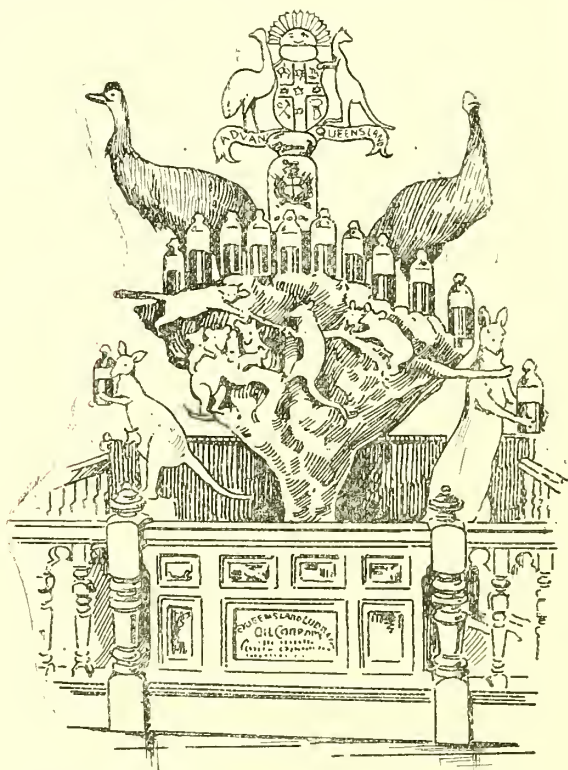
have succeeded in getting a space in the section for their sheep-dips, disinfectants, &c., which they exhibit in several forms, and, in the case of sheep-dips, with samples of wool and a large ram's skin exemplifying the detergent properties of the dips. The exhibit is a striking one, well-placed, and not without its attractions, there being a motive on the face of it. Quibell Brothers are also makers of disinfectant, domestic, and toilet soaps.

HINDS (LIMITED), OF LONDON.

are the only British brushmakers represented. Their exhibit is a most comprehensive one—large, always tidy (thanks to a modest English girl in charge), and distinctly interesting. The first World's Fair is recalled by three hair-brushes of quaint shape, made and exhibited in Hyde Park in 1851. The different kinds of wood used in making the backs of hair-brushes—satinwood, snakewood, tulip, zebra, cocobola, coromandel, and thuya—are shown in logs, and a finished in brush-shape. There is a series of hair-brushes in satinwood varying in size from 18 inches long to the tiny brush for baby. These occupy the base of one case. A new brush for ladies has been introduced; it is without a handle, and the back is so shaped that a good grip is obtained, and it is claimed that the absence of the handle secures less fatigue to the arm. In addition to the foregoing the exhibit contains a selection of nail, cloth, and shaving brushes, and the materials used in brushmaking.

THE FRENCH SECTION.

It is greatly to the credit of European exhibitors that they are amongst the first to have their arrangements complete.



ference, and is dressed and surrounded with products of the district, and embellished as shown in the figure. The railing is made entirely of the citron-scented wood, and the panels are relieved with photographs illustrating the method of obtaining the leaves and the oil. Around the wart are grouped kangaroos, emus, a cassowary, native bears, opossums, flying squirrels, and rock wallabies. It was intended to have a fountain from which the citron-scented oil was to rise in a delicate spray, but so far this is not at work; still, the air around the exhibit is odorous of the oil from the bottles held by the kangaroos and in the clefts of the wart. The oil is not solely derived from *Eucalyptus maculata*, var. *citriodora*, as there are also on exhibit specimens distilled from the leaves of the poplar-leaved gum, ironbark, stringy-bark, red gum, swamp gum, Moreton Bay ash, narrow-leaved and broad-leaved tea-trees, bloodwood, brighalow, and wattle blossom. The leaves

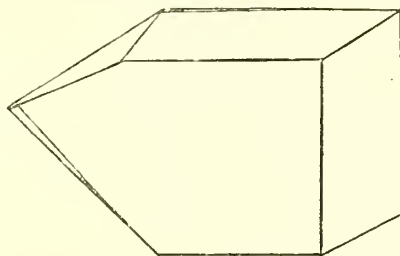
Russia was unfortunate, the whole of the exhibits—cases, pavilions, everything—having been blocked-up in the Baltic by the ice, and it was nearly the end of May before they reached Chicago. The Russian workmen, with their heavy top-boots and lethargic motion, were the laughing-stock of the Chicagoans, who prophesied that the Slavs would have their court ready in time for the Chicago ice. But the wise men of the district woke up one morning to find that the heavily-booted carpenters were one the better of them, and that the Russian court was complete. The same tale might be told all round: wherever foreign exhibitors brought their own workmen to fit up exhibits the work has been done promptly, but when local service has been relied on the delay has been pitiful. France has been wise. The fittings of the court in the Manufactures Building are of French design and manufacture, and are in every case elegant. This applies especially to the chemical and pharmaceutical court, which contains, besides medicinal products, a number of important exhibits of perfumery and painting materials. Altogether there are sixty-one exhibiting firms represented in the groups, and the combined exhibit is a highly creditable one. It enables us, moreover, to contrast the Chicago World's Fair with the last great one held in Paris in 1889. It could not be expected that the leading French firms would respond so numerously or so lavishly as they did then, but there is a business-like air about the whole court which is inspiring.

The volume of business in pharmaceutical manufactures between France and the United States is not very large, the only articles drawn from France in other than insignificant quantity being alkaloids and active principles generally. But of late years at least one Paris firm has pushed business in the States on the American plan, and with splendid results. The medical profession of the States appear to be wonderfully free from bias, and, granting that a speciality comes under their notice which is spoken well of by famous physicians abroad, the chances are that they will take to it, whether it be English, French, or German. That is the position in the medical profession.

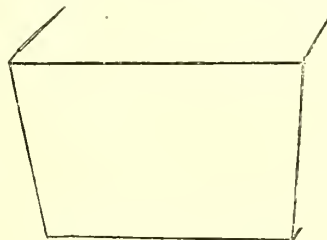
So far as pharmacy is concerned the tendency is all in favour of German chemicals; and here, again, a few houses of known repute have taken the field, and are keeping it by most energetic push. But the field is still big enough for any who care to adopt the same methods. French manufacturers, as a class, have not, so that their exhibits may be considered more patriotic and professional than commercial. Few though they be, they are of exceeding interest to the pharmacist. We can only refer to most of the members of the exhibits in general terms, and in such a way as will suffice to show the departments cultivated by individual firms, and the more notable amongst their products.

ADRIAN ET CIE. (SOCIÉTÉ FRANÇAISE DE PRODUITS PHARMACEUTIQUES).—"Active principles" might be the sign on M. Adrian's case, for although his firm exhibit ethers, metallic salts and scale compounds, benzoates, lactates, hippurates, and succinates, the principal constituents of essential oils, the bitter principles of drugs, and the more potent alkaloids are the most attractive specimens in the exhibit. The outline drawings which are annexed are reproductions from two crystals picked from a large dish of sparteine sulphate, a salt of an alkaloid discovered by A. W. Gerrard, and which has not hitherto been produced in such magnificent proportions. The drawings are just a trifle larger than the original crystals, which are about $1\frac{1}{4}$ inch long. Many crystals in the dish are of equal size, but those figured lent themselves best to reproduction in outline. In preparing alkaloidal salts in such exceptional magnitude of crystallisation it is requisite that the worker should eliminate all impurities from his solutions, and then allow them to evaporate with exceeding slowness. They are exhibition crystals, of course, for it would never pay the manufacturer to produce them on the commercial scale, nor would the form meet with the dispenser's approval. But there they are as a proof of manipulative skill and purity. With this we may group pure eserine in water-white crystals weighing a grain or two—not the largest we have seen, but notable on account of entire absence of colour, an exceedingly difficult thing to achieve considering that the trace of ammonia in the air suffices to give the alkaloid a colour varying from pale green to blood red. Then there is also some hydrastine, faintly yellow-tinted (the pure hydrochlorate is water-white)

and some of the crystals as large as a 4-grain pill. Amongst the neutral principles we noticed quassin in the amorphous brown powder prescribed so liberally by French physicians, and a more highly purified product in minute crystals, white and feathery. Also crystalline picrotoxin in distinct needles, asparagin like crys-tallised sugar, and solanine, arbutin, and strophanthin, which are practically indistinguishable, the crystals being minute and white. The terpene class of compounds have furnished Adrian et Cie. with equal scope for skill, and they have succeeded in grouping together a number of specimens which cannot fail to interest and instruct the pharmaceutical visitor. The series may be said to begin with terebene, then follow Berthelot's terebinthene and its crystalline monochlorhydrate, as the French euphoniouly call it, and the bichlorhydrate. Then comes terpenylene, also crystalline, terpene and terpinol, with an exceptionally



1. Sparteine sulphate. Side view of a crystal,

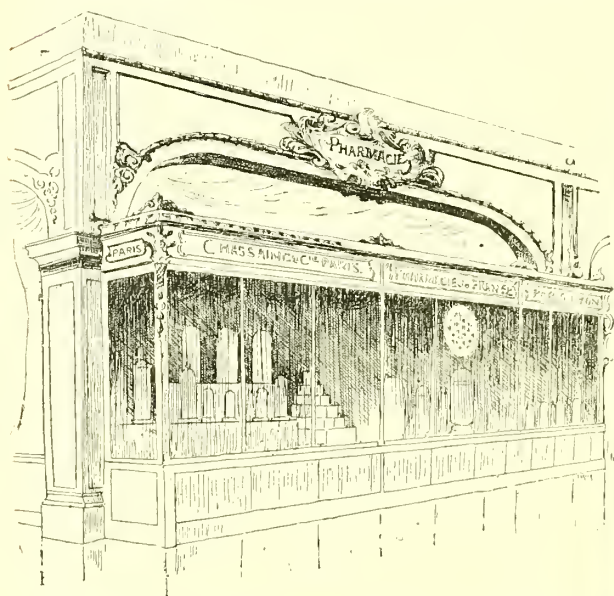


2. End view of another crystal.

pure specimen of the latter boiling at $176-180^{\circ}$ C. Eucalyptol and its bichlorhydrate in beautiful white crystals further help to exemplify the readiness with which liquid terpenic bodies change to the solid state when associated with an acidulous radicle; and another example of fine crystallisation in the shape of massive crystals of ordinary terpene may be placed at the tail of the show specimens. Half-a-dozen tiny bottles are in the bottom of the case, and curiosity helped to reveal the fact that these contain a series of lactoses—viz., the sugar of human milk, and of mare's, cow's, ass's, goat's and sheep's milk. There is about an ounce of each, and we question if they have ever been seen together before and in such quantity. Besides the terpenes which have been named there are others from well-known essential oils, most of them being associated with their bihydrochlorates; and as a setting to the whole is a strong border of every-day wants in the shape of digestive ferments and pills, granules, pastilles, and perles of rare and common medicines. M. Adrian visited Chicago to see his exhibit right. His case is lined with sage-green plush, and it has a handsome appearance.

CHASSAING ET CIE., 6 Avenue Victoria, Paris, occupy one of three cases which constitute the exterior of the Pharmaceutical Court, and about the only spot which we have found possible to reproduce in an adequate sketch. Here the decorative tones are black and gold, in contrast with the lavender of the interior. Chassaing et Cie. have 9 feet run of wall-space. The back of their case is covered with crimson plush, and the pedestals upon which the specimens stand are upholstered in old-gold plush. The effect is charming. The greater part of the space is devoted to the digestive ferments, pepsin and pancreatin of various strengths, and peptones. M. Chassaing has had the courage, in an Exhibition which has gone crazy about "absolute pepsin," to label his specimens with the modest figures of the French *titres*. It might still be advantageous to him, and instructive to American pharmacists who are familiar only

with the six-hours test, and with 1-1,000 to 1-10,000 pepsins, that M. Chassaing should place in his exhibit conditions upon which his standards are formulated, with the American equivalent of the results. There are so many pepsin-manufacturers in Chicago, and the ferment is produced in such prodigious quantities, that some people are apt to think that no other spot on earth grows the article. Against that view



the Chassaing exhibit is a solid fact. A dozen or so large vases of beautiful digestive ferments are the first sight on entering the French Court. In the corner of the case is a pyramid of specialities, such as Chassaing's digestive wine, Falieri's phosphates (a complete food for children), Vichy laxative powder, granular potassium bromide, and things of that nature.

While the picture is before us we may go out of the alphabetical order to take the exhibit next to Chassaing's—viz., that of the

PHARMACIE CENTRALE DE FRANCE,

of which M. Ch. Buchet is the head. This also occupies 9 feet of space. The case is decorated internally with blue plush. A most wonderful collection of organic products is displayed herein. The foremost place should probably be given to a magnificent vase of chloral hydrate, measuring 31 inches by 11 inches, occupying the centre of the case; and behind it is a smaller vase of anhydrous chloral, exactly resembling white vaseline in appearance. The Pharmacie Centrale has long been famous for its chloral, which it was amongst the first to produce on a commercial scale. In front of the chloral and at each side of it, in flat dishes of about 2 lbs. capacity, are a series of active principles in extraordinary crystals, which in quantity almost overflow the containers. These specimens are asparagin in crystals the size of a child's fist, and weighing several ounces—it reminds one of washing-soda; pure cocaine crystallised up to a weight of about 5ij. per crystal; atropine and pilocarpine nitrate, as they have been broken out of the crystallising-dish in pieces 3 inches by 3 inches, and fully 1 inch thick; and there are also arbutin, cicutine hydrobromate, erythrine, and quassin in well-defined or large crystals. In contrast with these we cannot avoid comparing the liquid alkaloids, nicotine, sparteine and cicutine, which are shown in 6-oz. vases, and, so far as appearance is concerned, are indistinguishable. Again, the wide gulf which separates the free liquid bases from their solid and crystalline salts strikes us, for the cicutine hydrochlorate in the exhibit forms water-white tabular crystals $\frac{1}{8}$ inch across, and, as we have already seen, the sulphate of sparteine is obtainable in large crystals. Magnitude is not, however, M. Buchet's sole aim, for in the inorganic part of the exhibit there is a specimen of potassium bromide in small granular crystals, a

form of much greater utility to pharmacists than the one generally seen. The object of the whole exhibit appears to have been to show the capabilities of the St. Denis factory, and that has been well accomplished, for, in addition to the extraordinary chemicals referred to, the exhibit comprises powdered drugs, metallic salts used medicinally, antiseptic dressings, extracts, and galenical preparations generally, and a line of packed goods. There are also many alkaloids besides those which we have named, and a trophy of medals which ere long will doubtless have the Columbian one added to it.

CORNU ET WARIN (41 Rue de Vanves, Paris) exhibit medicinal capsules and perles made of gelatine and gluten. The exhibit is a small one, and there is no feature about it calling for special comment.

DARASSE FRERES ET LANDRIN (Rue Pavée-au-Marais, Paris) make a small pharmaceutical exhibit, but a very good one of its kind. The firm are one of the principal wholesale drug-houses of France, and are producers of certain medicinal chemicals, as well as galenical preparations, which they display in one of the interior cases. The more notable specimens are iodoform in crystals like chlorate of potassium, in all but colour; a series of liquid distillates, comprising apiol, eucalyptol, ethyl bromide, and terpineol; a few active principles, such as quassin; the somewhat uncommon naphthol benzoate, which reminds us that the English spelling, "naphthol," is peculiar to England, even American pharmacists having fallen into the continental way of it—"naphtol." Darasse Frères are sublimers of camphor, and exhibit a specimen of their product, and as makers of cinchona liquor by De Vrij's method they show a sample of it; while the rest of the exhibit is made up with coated pills and perles and a few chemicals.

HEMOGLOBIN IN MEDICINE.

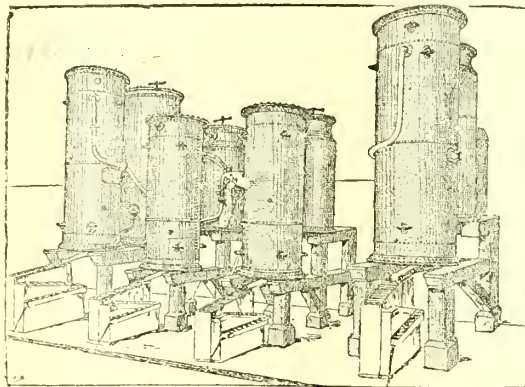
DESCHIEENS ET CIE., a firm associated with Adrian et Cie., are the makers of three hæmoglobin preparations which are highly popular in France. These are *sirap hæmoglobin*, *vin hæmoglobin*, and *dragées*, the first-named ranking as the most popular, both in France and in South America. As yet English physicians have used the peculiar colouring and vitalising principle of the blood to a limited extent, and this fact, considered alongside the extraordinary popularity of the Deschiens preparations (which are by no means the only ones of the kind in France), is a sufficient index of the differences of therapeutic tendencies in cultured nations. Perhaps there is no trouble so subtle and illusive as anæmia. Physicians are at one in the belief that iron in some form is the remedy, but it is in regard to the way in which it should be administered that those of different nations are not agreed. The French consider the iron of the blood to be the best form, but whether we are justified in regarding hæmoglobin as an iron compound rather than a complex principle of specific action is another matter. At all events, in Deschiens' method the hæmoglobin is extracted from the red blood-corpuscles in a pure state, and is then compounded into the preparations named. There is a dish of the hæmoglobin in the exhibit, and it is one of the wonders of the French Court, for it is in big lumps of silky crystals, with a beautiful mauve iridescent surface, and although the lumps are cubes of about 2 inches measurement one will scarcely turn the scales at 10 grains—a light thing to be such a handsome property. Deschiens, now living in retirement, takes from it royalties amounting to 60,000*fr.* a year, and the manufacturers net a profit of 100,000*fr.*, we are told.

FIDET ET CIE., of Paris, are manufacturers of *comprimés de Vichy*. These are compressed tablets of Vichy salts, which, on solution in water, form the wine-diluting beverage so popular in France. The exhibit of the *comprimés* is small but handsome, the case being lined with puce-coloured plush, upon which bottles of the article and small sample boxes are displayed.

MAISON GRIMAULT.

RIGAUD ET CHAPOTEAUT are one of the few Parisian firms who have established for themselves a reputation in the United States. Their agents there are E. Fougere & Co., and Mr. F. S. Mason, their representative, looks after the medical side of the business. Their exhibit is, in consequence, somewhat more varied in scope than is the rule in the court, and although many of the firm's manufactures

reach the pharmacist as packed specialities, the preparations are shown in bulk as well. We may note, for example, the alkaloids of cod-liver oil, which were first isolated by Gautier and Mourgues, and which in their combined state are known as morrhuol. Individually these principles are called morrhulines, and there are five of them. They are exhibited in the following forms:—(1) Morrhuine ($C_{10}H_{17}N_3$), a brown syrupy liquid, and (2) the same in silky crystals; (3) amylamine ($C_5H_{13}N.C_4H_9O_2$) bitartrate, an amorphous powder; (4) oxycolidine ($C_8H_{11}NO$) in light-brown scales, and (5) its hydrochlorate in well-defined crystals; (6) nicomorrhaine ($C_{29}H_{39}N_3$), which in the free state is a syrupy liquid, but in its salts is crystalline; and, lastly, (7) dihydrolutidine bitartrate ($C_7H_{11}N.C_4H_9O_2$) in silky crystals resembling asbestos. These principles can be extracted from cod-liver oil by treatment with alcohol, and they are shown for the first time to the public at the World's Fair. It is claimed that they, as morrhuol, represent the true nourishing properties of the oil—exciting the appetite, stimulating the kidneys, and generally acting as cod-liver oil acts upon consumptive people. At the suggestion of several American physicians, Rigaud et Chapoteaut have combined morrhuol with creosote and put it up in perles for the guaiacol treatment of phthisis. The manufacture of perles and capsules is an important part of the firm's business, and they have recently commenced to make the latter on the same principle as perles have so long been produced. Next in interest to the foregoing strontium salts may be reckoned, and of these there is a fine selection in the exhibit, including bromide and iodide in magnificent crystals and the lactate as a granular powder. The iodide is a peculiar salt; it keeps perfectly in solution, showing no tendency to liberate iodine (which in the solid state it has hitherto done), but about three months ago Rigaud et Chapoteaut succeeded in producing the crystalline salt in such a state of purity that it is permanent when kept in bottles with ordinary periodical exposure. Other members of the exhibit are apioline, hamoglobin in perles, pepsin (dialysed), pepsic-peptone, boldo-glucine (the glucosidal principle of boldo-leaves, which reminds one much of golden syrup), ethylic chloral, in which the group $C_2H_5.O$ takes the place of the H_2O of chloral hydrate, with the result that we get a salt closely resembling it in appearance, and the same in physiological action, but which is borne more readily



by the stomach. Guaiacol from creosote the firm have ventured to show of 90-per-cent. strength, claiming that the difficulty of keeping absolute creosote-guaiacol in the crystalline state exceeds the advantage of the extra 10 per cent.; but from an ice-chamber below the case Mr. Mason produced a bottle of the crystals, with the remark that most of the crystalline guaiacol in the market is the synthetic product. Last of all, we may mention the French firm's great "leader"—Santal-Midy. This is simply a very pure sandalwood oil, distilled by them from wood directly imported from Mysore. Mr. Mason visited India about eight years ago to make arrangements for a regular supply of wood, and while there he studied the native method of distilling the oil, as well as the yield, of the woods of different States, and his conclusion was that the Mysore wood gives the best yield and the best oil. He practically accounts for the high density and viscosity of Indian-distilled oil by the fact that the process of distillation is so slow that the oil

is partly oxidised, not that the open fire employed dissipates the more volatile portion. He also confirms the belief shared by some pharmacognosists that the fresh wood yields a better oil, and it is for that reason that the firm bring their imports of 350,000 lbs. annually direct from Mysore to France. The consumption of Santal-Midy in the United States at present amounts to 36,000 bottles a year. A large vase of the oil is shown in the case, and we noticed that it is of a dark sherry colour, and remarkably viscous. The illustration which we append shows the peculiar form of still used by the firm for sandalwood oil. In its structure oxidation is specially provided against.

RIGOLLOT ET CIE. have a case devoted solely to their well-known mustard-leaves, but upon this and similar exhibits we shall comment in another report.

SOCIÉTÉ DU TRAITEMENT DES QUINQUINAS (8 Rue Malher, Paris), makers of the well-known Pelletier's quinine, make an exceedingly handsome display of their manufactures, which now carry with them fifteen awards made at exhibitions, beginning with Paris in 1834, not many years after quinine was discovered. Their exhibit comprises thirty-seven specimens, amongst them being one of pure quinine and twenty of its salts, of which the most interesting in every respect is Grimaux's chlorohydro-sulphate, which is soluble in its own weight of water, and is, according to Laborde, identical in action with ordinary salts of quinine, but manifests its influence much more quickly. It is a true double salt, although Grimaux suspects that one of the acids is united to the nitrogen of the chinoline group, and the other to the nitrogen of the piperidine group of the molecule. The salt is shown in small white crystals, the absence of colour and the dryness of the salt being noteworthy features. Cupreine, cinchonamine, cinchonidine, and cinchonine, with some of their salts, are also exhibited. Cinchonamine is an alkaloid obtained from *Remijia Purdieana*, and, in addition to being much more powerful in action than quinine, possesses the remarkable property of precipitating nitrates, its own nitrate being but sparingly soluble in water. Three fine samples of analgesine (French for antipyrin) are also exhibited in the prettily-draped case.

L. THIERCELIN ET CHARRIERS are producers of saffron at itthiviers-en-Gatinas, and they exhibit two specimens of their product—one in threads, the other in powder—with a tiny bed of artificial iris-flowers as the base of the case, which they quaintly call "Saffron's Plantation." The firm strongly condemn saffron-adulteration, and, in a circular, give full directions for its detection. The following strikes us as the most pregnant passage:—

Inasmuch as adulterated saffron is heavier than pure saffron adulterations can likewise be detected by weighing about 200 stigma of pure saffron and 200 of doubtful saffron, which stigma should be about the same thickness.

EXAMPLE.

Pure saffron	0.780
Doubtful saffron	0.430
0.780 : 100 :: 0.430 : x = 55.123	
Pure saffron	55.123
Added substances	44.872
	100.000

showing in this case 44 to 45 per cent. of adulteration.

We were enabled to inspect the exhibited samples, and found them to be of excellent quality, the odour and colour being especially fine.

Personalities.

MR. ALDERMAN EDWIN HANDFORD, senior partner in the firm of Handford & Son, chemists and druggists, Torrington, Devon, has been appointed a magistrate for the borough.

WE had the pleasure of a call the other day from Mr. W. K. Mager, of Mager & Walsh, chemists, Queenstown, Cape Colony, who is on a visit home at present. Mr. Mager is a very active worker in the South African Pharmaceutical Association, of which he has been president, and he reports that the Association is doing good work in the Colony by binding the members of the craft together. He is also a member of the Pharmacy Board of the Colony. Mr. Mager hopes to be able to attend the Nottingham meeting of the Pharmaceutical Conference.

Bankruptcies and Failures.

*Re J. HUNTER WATTS & Co., 39 Seething Lane, E.C.,
Chemists and Merchants.*

THIS case was mentioned to Mr. Registrar Linklater at last Tuesday's sitting of the London Bankruptcy Court, it being in the list of the day's examinations. The debtor failed last May, with total debts 437*l.* 19*s.* 1*d.*, and assets valued at sufficient to provide a small surplus. It was now stated on his behalf that, with the exception of a small amount the debts had been satisfied, and when the arrangements had been completed, an application would be made to rescind the receiving order. The public examination was adjourned to October 24, to enable those steps to be taken.

*Re M. WILLIAMS, 27 Chancery Lane, W.C., Chemist and
Teacher of Chemistry.*

THE adjourned first meeting of the creditors under this failure was held on Friday last, at the London Bankruptcy Court, before Mr. C. A. Pope, Assistant Receiver. There was no offer submitted, and the case was left in the hands of the Official Receiver to be wound up in the ordinary course of bankruptcy. The accounts filed by the debtor since the last meeting show total liabilities amounting to 1,919*l.* 9*s.* 1*d.*, of which 1,400*l.* 0*s.* 7*d.* are expected to rank, against assets expected to realise 456*l.* 8*s.* 6*d.* The debtor was ordered to attend the court on the following Tuesday, for his public examination. The following are the principal creditors, viz.:—

Unsecured.

	£	s.	d.
Adams & Co., Fleet Street, E.C.	31	10	0
Alexander & Shephard, 27 Chancery Lane, W.C.	24	0	0
City School of Pharmacy and Chemistry (Limited), 27 Chancery Lane, W.C.	325	0	0
Evans, E., 40 Great Russell Street	385	0	0
Harrison, C. A., Birmingham	10	0	0
Henderson & Liddell, 3 Eastcheap, E.C.	315	0	0
Kemp, T. H., Machynlleth	17	5	9
Mitchell & Co., Red Lion Court, Fleet Street, E.C.	13	10	0
Riviera Company, 66 Basinghall Street, E.C.	73	0	0
Roberts, John, Exors. of, Pontgool	17	0	6
Treble & Sons, Rhodes Street, St. James Road	22	7	6
Willows, Francis & Butler, High Holborn	26	5	0
	15	10	0

Fully Secured.

Harris, E., 216 Tottenham Court Road	50	0	0
Prudential Assurance Association, High Holborn	23	0	0

Preferential.

Creditors for rent, &c.	449	8	6
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Mr. Registrar Linklater presided last Tuesday at a sitting of the Court, when the bankrupt presented himself for further examination.

Mr. C. A. Pope, Assistant Receiver, conducted the inquiry. In the course of which the bankrupt stated that he started the City School of Chemistry and Pharmacy at Eldon Street in 1882, subsequently removing it to 27 Chancery Lane. It was conducted as a private concern till 1888. A profit had been made, although he was unable to state the actual income. Having no capital of his own, it was necessary to borrow money from his wife, who had lent him sums at different times to pay the expenses of advertising the school and to defray his hospital fees. The loans extended over several years, and would amount in the aggregate to over 1,000*l.* In return for the money advanced for the advertisements, an agreement was executed by witness to hand over to his wife two-thirds of his interest in the school. He converted the school into a limited company in 1888, with a capital of 2,000*l.*, the whole of the shares, with the exception of seven, being allotted to him in consideration of his interest in the school. A few shares were sold by him to other persons, and after the capital had been increased, 140 shares were taken up in response to an invitation given to the public. The resolution to increase the capital was passed at an extraordinary meeting. He was unable now to state who was present at that meeting, but denied that he was the only person that was there.

At this point the debtor refused to answer the questions on the ground that they related to the affairs of the company and not to his bankruptcy.

The learned Registrar ordered him to answer, stating that if a person who was insolvent turned his business into a company, and thus placed his property beyond the reach of creditors, it was a matter of conduct and called for explanation.

In reply, it was urged that the transfer took place some years ago; to which his Honour replied that it might have taken place twenty years ago, but that made no difference to the right to examine whether there was any fraud in the transaction.

Questioned respecting the disposal of the shares allotted him, witness stated that in pursuance of the agreement he transferred 1,400 to his wife in 1889. That was done by means of a blank transfer which he might have given so late as January last. He had deposited 500 shares with a Mr. Harris as security for cash of advances 40*l.*, and interest thereon, 10*l.*, and at the present time he (witness) still had 74 shares.

Mr. Pope inquired why those 74 shares had not been given up to the Court; whereupon the witness produced them from his pocket, and handed them over.

In further examination, the bankrupt said that the shares made over to his wife were still in his name, he holding them as trustee on her behalf. As to the shares deposited with Mr. Harris a blank transfer was also given, and the shares, he believed, had not yet been registered in the name of that gentleman. He had valued those shares in the statement of affairs at three-fourths of the face value, so that he gave Mr. Harris shares to the value of 375*l.* to secure a debt of 50*l.* At that time he wanted money badly. Dividends of 5 and 7½ per cent. had been paid by the company, the last one being paid at the close of 1890. Witness had received those dividends upon his shares. The company carried on its business at premises leased to witness after the conversion. He had also held a lease of the chemist's shop, but had to surrender that to the landlord, it having lapsed upon his becoming a bankrupt. The rent of the shop was 130*l.* a year. As managing director witness was entitled to 200*l.* per annum for his services, but between 1890 and 1893 he drew 300*l.* a year, which was, he admitted, 100*l.* a year beyond that to which he was entitled. The secretary was partly to blame for that; whenever witness wanted money he simply asked the secretary for it.

His Honour asked whether the bankrupt wished the Court to believe that he did not appreciate the fact that he was taking 50 per cent. beyond that to which he was entitled, and why the blame should be thrown on the secretary.

The bankrupt replied that he did not necessarily throw the blame on that official.

Mr. Pope: Would not the secretary do exactly as you told him?

In reply, the witness was understood to say that when he asked the secretary for a 10*l.* note he would always give it to him. A sum of 300*l.* had been advanced by Mr. Harrison, of Birmingham, for the purposes of the chemist's shop. The money was advanced to Mr. Reginald Harrison; but although witness did not receive one farthing of the money, he had scheduled Mr. Harrison as a creditor for 315*l.*, his reason being that the money was advanced to the company, and he was held liable for it personally. He repeated that he received nothing whatever as consideration for that debt. The money was advanced in various amounts, and was used, he believed, in the expenses of the shop. When it was advanced witness regarded the shop as part of the company's property, but about the end of 1892 he discovered that that was not the case. Other accounts shown in his statement of affairs were in respect of goods supplied to the shop. Although they were purchased on behalf of the company, witness had included them in his list of debts, being advised that if the Official Receiver had any remedy against the company he could take the necessary steps. He (witness) had no banking account, nor any furniture. It was true that a short time before the failure he executed a deed of arrangement, and made an affidavit in connection therewith that the value of his property was only 150*l.* The value as shown in the banking account was a much larger sum.

Mr. Pope: How do you explain the difference?

The bankrupt objected to the line of examination, and complained that the Assistant Receiver was being instructed or prompted by Mr. Harrison.

The learned Registrar ordered him to give proper answers on the point, and pointed out that no one could make a person go before a commissioner and swear to untrue facts.

In reply, the witness said he did not include the stock-in-trade at the shop when making the affidavit, although he knew that the question of the ownership of the shop had been previously settled. When he found that he had made a mistake he filed his petition.

His Honour: Did not you file your petition because you were in gaol and could not get out in any other way?

The bankrupt refused to admit that to be the case. He thought the 150% referred to in the affidavit included 574 shares, because the 500 shares were only deposited with Mr. Harris as security. The 1,400 shares belonged to his wife under the agreement, and were consequently on a different footing to those deposited with Mr. Harris. The landlord of the Chancery Lane premises distrained just before the failure, and witness, at the request of the directors, applied for an injunction to stop the distraint. He (witness) had pawned a watch, chain, and ring, and if he could find the tickets they should be handed over to the Official Receiver. He had not lost any money over the School of Chemistry, but did make losses over the sale of certain proprietary articles whilst in partnership with a Mr. Green. They manufactured various substances at Red Lion Square, amongst the number being some half-dozen euca preparations—in the shape of wine, lozenges, &c.—and a Spanish ink. No liabilities were outstanding in respect of that partnership, which expired in 1888 or 1889. Whilst they were being manufactured, witness sold the articles at the shop, and considered he was a proprietor of them; but since the manufacture had been given up he placed no value upon his interest. The books relating to that manufacture were probably disposed of about three years ago with other waste-paper. The debts shown in the statement of affairs included one to the executors of Mr. John Roberts, which was in respect of money borrowed by witness jointly with another person. At the date of the failure the school shares had no marketable value, and although the company's business showed a profit, the shares were not taken up by the public. He ascribed his failure to the heavy expenses of advertising the school, but was of opinion that if he had been let alone, he would have been able to pay his debts in full. He had also been hampered by illness. This was his first failure.

A creditor rose to examine the bankrupt further, and eventually the hearing was ordered to be concluded.

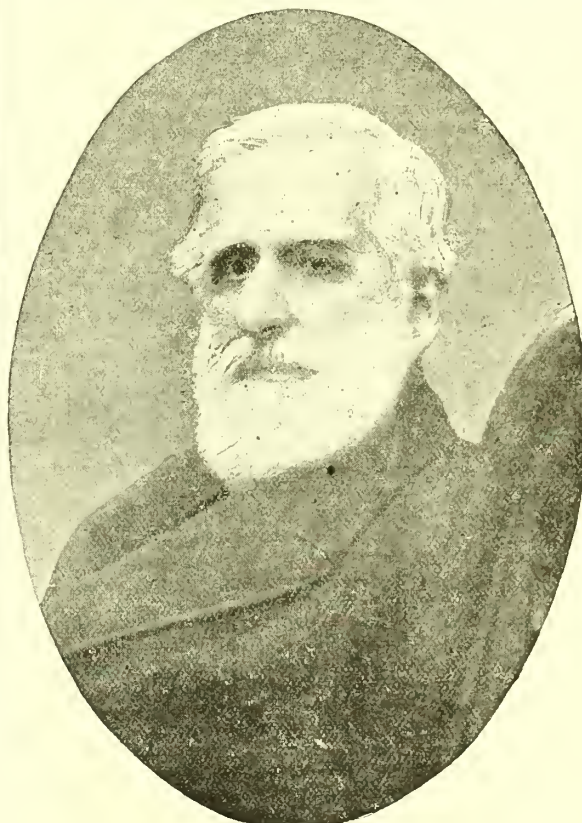
DEATHS.

FUGE.—At his residence, Newcastle, Staffs, on July 16. Mr. Harry Dixon Fuge, pharmaceutical chemist, aged 25 years. This brief announcement is pregnant with pathetic interest, for in the death of Mr. Fuge, which followed a four days' illness from a severe attack of scarlet, we lose one of the most brilliant young pharmacists of our time, and a man for whom a distinguished future appeared to be in store. Mr. Fuge first came under our notice when, as an apprentice, he entered our Corner for Students' Competitions in 1887. He at once took a good position (fourth place with 90 per cent.), although, as we have since learnt, the exercise was the first one in analysis which he had ever done. He continued the exercises for four occasions, when he secured the first prize with full marks. This was excellent work for a self-trained man, but Mr. Fuge had already given evidence of exceptional ability, having as a boy gained a scholarship, and then passed the Cambridge Local Examination in the first class. In July, 1888, Mr. Fuge entered the Bell Scholarship competition, and came out at the head of the list. His studies in the School of Pharmacy were attended with exceptional success, and at the end of the year he carried off the silver medals in practical chemistry and botany, and bronze medals in materia medica, botany, and pharmacy, as well as certificates. He also passed the Minor and Major examinations, and at the end of the session secured the Pereira medal, thus coming out the best man of his year. Professor Atfield appointed him a demonstrator

in practical chemistry, and he acted in a similar capacity for Professor Green. While demonstrating in the Square Mr. Fuge passed the first B.Sc. London, and having been awarded a sizarship in Cambridge University, he resolved to go in for higher branches of science, and his way towards this was considerably facilitated at the end of last year by his gaining a Major scholarship of 100% a year at Trinity College. This was obtained during his first term of residence in Cambridge, and the award was quite exceptional, as the scholarship generally falls to second and third year men. It will thus be seen that in Mr. Fuge we have lost no ordinary student, and that loss will be deplored by the wide circle of friends in pharmacy whom he had won by his conspicuous ability and modest bearing. His memory also requires it to be said that during his whole career he worked practically single-handed, being an orphan; but he had a good friend in his uncle, Mr. Alfred H. Mason, of New York, who was his constant adviser.

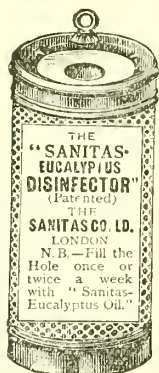
HOWELL.—Mr. Evan John Howell, aged 39, a chemist's assistant, of 1 Calderon Terrace, Leyton Road, Leyton, Essex, died on June 12 under peculiar circumstances. The deceased, on June 12, complained of pain in his right leg, near the knee, which, it appears, he injured over a year ago. By his direction, his wife applied two leeches and a poultice, which gave relief, and the deceased apparently went to sleep. Some hours afterwards he was found dead in bed, the cause of death being syncope.

MR. JOSEPH SIDNEY LESCHER.—We were, unfortunately, unable to publish a portrait of the late venerable head of the firm of Evans, Lescher & Webb in our last issue. We remedy



Yours sincerely
J. S. Lescher.

the deficiency this week. The portrait we publish is from a photograph taken about four years ago, the last taken of Mr. J. S. Lescher. It was an excellent likeness.



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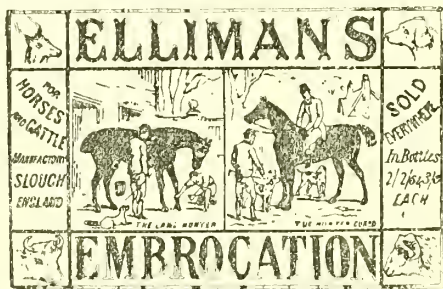
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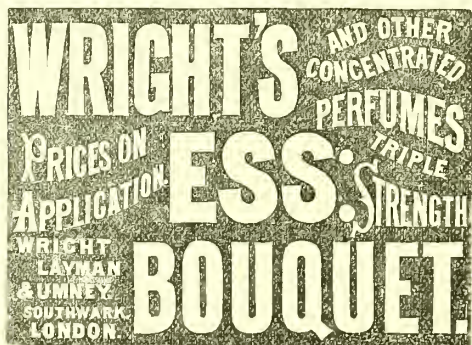
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Editorial Comments.

AMENDING THE MEDICINE-STAMP ACTS.

THE Nottingham Chemists' Association have been instrumental in extracting from the Board of Inland Revenue the

most definite offer of an amendment of the Medicine-stamp Acts which has yet been suggested. It would be, perhaps, more correct to describe what they have done as bringing the Board's offer into publicity rather than having originated it. We understand, from the report, the present Chairman of the Board to intimate that his predecessor had invited the Pharmaceutical Society to advise the Board on the possible amendment of the Acts. This proposal may not have seemed so definite an invitation as it now appears to have been, but however that may be no official notice seems to have been taken of it. It is satisfactory, however, to learn that "the present Chairman will be most willing to consider the question with any body or bodies having the authority to speak in the name of chemists of Great Britain."

Nothing is so perfect but that it may be capable of amendment, and this truism is certainly applicable to the Medicine-stamp Acts. They are, as the Chairman of the Board is good enough to acknowledge, somewhat ancient, and we can quite believe that the duty of interpreting them is a difficult and disagreeable one. Whether it is possible to invent any simpler formula for determining what medicines are liable to stamp-duty remains to be seen, but no doubt some of the more reasonable grievances of which chemists have from time to time complained can be provided against. It may be taken for granted that the Treasury will not abandon the annual quarter of a million which it draws from the taxation of proprietary medicines, and we are quite in accord with those who hold that it would not be to the interest of chemists and druggists that they should do so. The tax, although paid through chemists, certainly does not fall upon them, and so long as indirect taxation is maintained at all, and while medicines generally are obtainable free from any Government duty whatever, we can scarcely imagine a more suitable object for stamp-duty than particular forms of medicines produced for the profit of individuals. Rhubarb pills anyone may supply, but if any person is so fastidious as to insist upon having "Mr. Blank's Rhubarb Pills" we do not see any powerful reason why the Government should not impose a moderate duty on this preference, beyond the economic reasons which may be urged against any interference with trade.

The most reasonable complaint of the Medicine-stamp Acts that we know of is that they do not allow chemists to supply useful information to purchasers on the labels of ordinary non-proprietary Pharmacopœia medicines. A bottle containing sal volatile, for instance, becomes liable to medicine-stamp duty if the label states the dose to be taken for a headache. Strictly speaking, every bottle of medicine supplied in a medicine-chest is liable to duty if the labels attached or the book of instructions included in the chest state the uses of the medicines. In the latter case, we have never heard of the Board of Inland Revenue putting forward a claim, but they have often insisted on the observance of the Act in regard to Pharmacopœia medicines. We are convinced that in this matter some arrangement can be easily adopted which would be greatly conducive to the advantage of the public as well as to the convenience of chemists.

The difficulty which has sometimes arisen in regard to medicines common to the trade, but sold under a title suggestive of proprietorship, such as "Gregory's Powder" and "Blaud's Pills," might be easily settled if the Board of Inland Revenue would accept from the Pharmaceutical Society a schedule of the few articles which would have to be included in such a category, and would undertake to regard them as liable to duty.

In the event of any amending Bill being drafted, it would

be a convenience if the schedule to the 52 Geo. III. c. 150 were wiped out completely. There are no medicines named in it which ought to be taxed and which would not come under the definition in the general charge of duty. It would free the statutes from a long list of obsolete preparations which now encumber it and its administrators from the objectionable duty of ignoring its provisions as they do in the case of such articles as eau de Cologne and Friar's balsam, and it would relieve the law from such a protective distinction as that implied in the line "foreign medicines of all kinds except drugs," which also is not enforced.

We shall be pleased to hear from chemists who have reasonable suggestions to make in regard to the amendment of the Act, as we seem to be coming within measureable distance of some modification. But beyond the instances we have suggested, together with the adoption of a more modern, and if possible a more explicit phraseology, in the statute, we do not believe that chemists have much to gain from its reconstruction.

ASPECTS OF AMERICAN PHARMACY.—I.

THE chief interest attaching to the International Pharmaceutical Congress which meets in Chicago next month will be the opportunity which it will afford those leaders of the profession in Europe who participate in it of comparing the condition of pharmacy in America with that in the Old World. It will surprise visitors to find that the American drug-trade shows but few signs of the newness and rawness which are supposed to be characteristic of a young nation, for in the leading cities there are pharmacies holding a heritage of credit, distinction, and influence, and there are pharmacists as accomplished and ambitious as any of their European *confrères*. Moreover, there are hundreds of men engaged in American pharmacy who have received their preliminary training in European countries, and who have brought the influence of their education to bear upon accepted American or traditional methods. American pharmacy is, therefore, in a large measure cosmopolitan, yet it is in many respects peculiar. It is to these peculiarities that we desire to draw attention.

From the trade point of view American pharmacy is unsatisfactory. Nostrums, competition, and cutting have quite changed the trend of trade within recent years, for while retail pharmacists formerly had leisure to devote to advancing the professional side of their calling, their time during the greater part of the twenty-four hours is now employed in business. Long hours are universal, and there appears to be no prospect of reducing them in the least. This condition is due partly to the changes above referred to and partly to the extremely mixed character of retail pharmacy in the States. A druggist's stock there, in all but a few of the best pharmacies, consists of medicines, paints, oils and glass, liquors, stationery, soda-water, and cigars. The last two, like Paddy's pig, pay the rent (often immoderately high); the volume of the rest depends upon district and season, and their manipulation does not detract from the respect of the public for the druggist, especially if he be a man who manages the liquor part of the business with discretion. It does, however, appear that the introduction of a refreshment-bar in the shape of soda-fountain and cigar-counter into the drug-store is having a decidedly demoralising effect upon the American pharmacist: it is the demand for drinks and "smokes" that keeps his lights ablaze until midnight, and the substantial returns suffice to justify his attention to this part of his business. There seems to be no special reason why soda-fountains should be so closely

associated with drug-stores, for it is noteworthy that in the leading stores, having big businesses, the dispensers of drinks are not druggists' clerks but expert mixers of drinks—strictly speaking, bar-tenders. They know nothing about pharmacy, and more about the drink-mixing than their employers. They have accomplishments all their own, but which do not fit them better for a soda-fountain in a pharmacy than one in a candy-store. Where the business is not big enough to support one of these experts the drug-clerk or the apprentice does the mixing. This practice introduces an element into American pharmacy of which there is no exact parallel in Europe, and for that very reason European pharmacists may be prejudiced against what to them is often associated with the beer-shop and the wine-bar. But the opinion is growing in the States that the soda-fountain is having a deterrent influence upon the progress of pharmacy, since it is drawing the interest of a large portion of the trade away from the purely technical side. For this there seems to be no immediate remedy, and, it ought to be said, no general or expressed feeling that the soda-fountain is bad. It brings legitimate business, and there is an end of the matter; but we may be thankful that climatic conditions have hitherto prevented the introduction of the soda-fountain into English pharmacies.

Far more serious to the American drug-trade is the steadily growing popularity of proprietary medicines. The extent to which these are consumed is inconceivable, for, whatever the cause may be—rush of business, rapid eating, iced water, or extremes of temperature—dyspepsia, liver troubles, and other annoying maladies are universal, and people seek relief in what happens to be the popular medicine of the day. This was good for the druggist while prices were at par, but since they have been cut by soft-goods men, and two-thirds of the business consists of "patents," the result is exceedingly serious to the druggist. Nor can he remedy the matter in the least. The manufacturer advertises, the consumer believes and buys, and somebody must sell. Simultaneously with this hard knock the American druggist has met with an attack from another side: the doctor is no longer his faithful ally, but has begun to do his own dispensing—a small stock of pills or triturations sufficing to meet all the needs of a family practice. The druggist feels the change; indeed, the comparative rarity of prescriptions is one of the things which compel him in self-defence to cultivate the soda-water and cigar business. He is, therefore, largely a creature of circumstances, and, these being at present against him, European pharmacists should not expect either much science or high philosophy from behind the drug-counter. They must remember that their American *confrère* is in a greatly overmanned trade, that competition is keener, business quicker, and hours longer than in Europe; and should his soul be above the making of dollars, or his aspirations lead him to cultivate the professional *technique* of his calling, he has little to encourage him in prosecuting research or advocating reform, for, after all, there are few nations so imbued with *laissez faire* notions as the Americans. How this affects pharmacy we propose to show in another note.

THE ALKALI-MANUFACTURE IN THE UNITED KINGDOM.

THE Twenty-ninth Annual Report of the Chief Inspector of Alkali-works, which has just been published, is an instructive and in most respects a cheerful Blue-book. The only unsatisfactory feature is the evidence it affords of a gradual diminution of the manufacture of alkali in this country. We presume this is due to the increased charges established by

the union of alkali-makers formed some two years ago; but as these mean the difference between a profitable and an unprofitable industry, the discouragement at first suggested may be fully compensated.

The number of alkali-works in England and Ireland is now exactly 100. In 1891 it was 113, and in 1890 117. Only one of these alkali-factories is in Ireland. In Scotland there are 16, which is the same number as in the previous year, for though one new factory has been started there an old one has been dismantled. The salt decomposed for the manufacture of soda throughout the United Kingdom, and in both the Leblanc and the ammonia processes, is represented in the following table:—

		1892	1891	1890
		Tons	Tons	Tons
Leblanc process	..	519,593	557,863	602,769
Ammonia-soda	..	304,697	278,528	252,260
Total		824,490	846,391	855,029

The substitution of the ammonia for the Leblanc process, though advancing, is delayed by the still unsolved problem of the production of bleaching-powder and chlorate of potash in sufficient quantity to meet the demand, these essential chemicals being by-products under the Leblanc process, and not obtainable in the ammonia process. Messrs. Brunner, Mond & Co. are making bleaching-powder on a large scale at Winnington, but their experiment is still too young to be judged commercially. That the advantages of both systems are appreciated is evidenced by two circumstances. The United Alkali Company are erecting works at Fleetwood for the ammonia process, which will make eight works in England where this method is in operation; while two new works for the Leblanc process, were established during 1892—one at Irvine, in Scotland, the other at Felling-on-Tyne. It might have been thought that the possibilities of new developments in the manufacture of alkali had been exhausted, but the untiring vigour of our scientific manufacturers is manifested by experiments being carried out at Mr. Gossage's works and at Bristol on a process of his devising, which combines some of the features of the Leblanc and the ammonia methods. Mr. Gossage reduces the sulphate by the aid of coal in an ordinary black-ash revolver, and after lixiviation acts on the sodium-sulphide liquors with carbonic acid from a lime-kiln. He thus obtains bicarbonate of soda, as in the ammonia-soda process, but without the use of ammonia, and, though using the earlier portion of the Leblanc process, he avoids the use of lime, and so makes no sulphurous tank-waste, but recovers all the sulphur as sulphuretted hydrogen expelled from the sulphide by the carbonic acid.

Mr. Fletcher, the Chief Inspector under the Alkali Act, and the local inspectors, who are intimately acquainted with the works, all hold a strong opinion as to the benefits which have resulted from the union of the works into one company. Mr. Fletcher says:—

A wholesome competition has been established among the managers, and the directors, having the detailed reports before them, have been able to make exact comparison between the different systems of management and working. All that was best in the practical details of manufacture, though found in practice possibly in one of the smaller works, has been adopted in all, and those which were proved, on strict comparison, to be wasteful have been abandoned. Thus a system of selection has been carried on, which has operated more rapidly and by a less painful method than Nature's process of the survival of the fittest. The best of the managers have been promoted to the oversight of districts, and these receive guidance from the central office.

Thus a uniformity of method is maintained throughout. One excellent laboratory has been established, and placed under the care of Dr. Hurter and a staff of able chemists. Here all materials are tested, and any new process that is proposed to the company receives a thorough investigation.

The success of the Act in preventing the pollution of the air by alkali-works has been remarkable. The average of nearly 5,000 tests made by the inspectors during the year shows that the actual amount of acid and corrosive gases which escapes into the air through the chimneys is considerably under one-half of the limit permitted by the Act. Mr. Fletcher seems eager, too, to demonstrate that chemical-works are peculiarly salubrious spots. He gives a diagram and a quantity of statistics, the object of which is to prove that the death-rate of Widnes is below the average of Lancashire towns, and that the deaths of workers in alkali-works are certainly not more frequent in proportion than in other industries. He adds particulars of the new Act which came into operation in April last, bringing a number of other works under the supervision of the alkali inspectors. In Mr. Fletcher's opinion the Act ought not to have defined the classes of works to be inspected, but should have scheduled the gases to be watched for, and given power, we assume, to inspectors to visit any place where such gases were produced. With much deference to the opinion of an expert, we venture to think that such a vague commission would have been found practically unworkable.

VETERINARY CHEMISTS.

At a meeting of the Council of the Royal Veterinary College held on July 15, and reported in the *Veterinary Record* of July 15, the secretary read a report from the Registration Committee in which the decision of Justices Day and Lawrence in the "Veterinary Chemist" case was mentioned. The following remarks on this case were made in the Council:—

Prof. Walley: I should like to ask if the decision with reference to the "veterinary" chemist business is final, and if this Council is now absolutely helpless in the matter. It seems a monstrous thing that a man should call himself a "veterinary" chemist if he chooses.

Mr. Thatcher (solicitor): There is the right of appeal to the Court of Appeal, and then to the House of Lords. Whether it is advisable to undertake an appeal is another matter.

Mr. Trigger: As a member of the Registration Committee, I can assure Prof. Walley that we keep our eyes open to those cases. We think it better to take another case than to appeal on this case. The Registration Committee have given great attention to this matter, and as long as we can get another case we shall not lose sight of it.

We do not know how far Mr. Trigger is authorised to speak on behalf of his committee, but we can hardly suppose that any Council, present or future, will ever wantonly spend its money in such a riotous indulgence in forensic extravagance as he suggests.

THE CUSTOMER IN A HURRY.

There is a very humorous page in this week's *Moonshine* which conveys a moral to those very conscientious pharmacists whose punctilious observance of details in the supply of the simplest articles is sometimes a little more than an impatient customer cares for. A venerable and learned-looking chemist stands behind the counter, and a gentleman in a violent hurry enters the shop and asks for "Twopenny-worth of camphorated chalk, please." Very deliberately the chemist asks, "Will you have it in two packets, or"—turning to his shelves—"in one? You can have whichever you

like." Then, as he meanders about his shop, he remarks "Some prefer the small bottles. Shall I show you the small bottles?" The order is at last in a fair way of being executed, but as the packet is being carefully sealed and labelled Mr. Chemist dribbles out platitudes about the weather, to the violent irritation of his now almost frantic customer. "We have had a very fine summer so far"—customer gnashes his teeth—"although the farmers could have done with a little more wet." Customer gathers himself together. "But still we must not complain, you know." Chemist looks up, and finds his client has bolted without his camphorated chalk after all.

AN EXCURSION OF TWO.

We should like to know the names of the two enthusiasts who as the Edinburgh Chemists' Assistants' and Apprentices' Association indulged in a botanical excursion on Wednesday evening of last week. It was a wet night, and "wet" in the neighbourhood of Arthur's Seat has a special significance, which must be experienced to be appreciated. Yet the two unnamed enthusiastic botanists made Arthur's Seat their exploring-ground, and, sliding over it, "were rewarded by obtaining"—but really the names of the specimens are of far less importance than those of the ardent hunters. We hope the other members will give them a good cheer when they start from the Caledonian Station at 5.45 next Wednesday morning to explore Craigercock.

"TRUTH" ON THE MEDICINE-STAMP.

Elsewhere we quote the narrative which a chemist is said to have given to *Truth*, which *Truth* gives to the world, and on which it bases an indignant criticism on the Board of Inland Revenue. It is to be hoped that Mr. Labouchere's statesmanship is generally better founded than his advocacy of the repeal of the Medicine stamp Act is on this occasion. It may or may not be good policy to advocate its repeal, but there can be no sense in supporting the demand by obviously inaccurate statements. The chemist whose somewhat sleepy assistant sold a bottle of rheumatic-mixture unstamped, though it is not alleged that there was any question about its liability to duty, became subject to penalties amounting to "about 50%." There must be a great deal of virtue in that blessed word "about" this time, as the outside penalty impossible for the alleged offence is 10% The chemist's excuse for "exposing for sale" a bottle of rheumatic-mixture unstamped seems to have been that it would be too great a sacrifice of capital to affix the 1½d. stamp until he was sure of selling the bottle. But as the stamp never was affixed this argument seems a weak one. It is comforting no doubt, for the detected chemist to be defended so warmly in an influential journal like *Truth*, but, for our part, we remember the thousands of chemists who are trying to obey the law, and who are subject to unfair competition if others less scrupulous, are to get a 10-per-cent. advantage over them, and this moderates our sympathy for the unfortunate proprietor of the rheumatic-mixture whose case Mr. Labouchere so warmly espouses.

POISONS AND PIETY.

"We are holding a bazaar in aid of the Church of England Zenana Society on Tuesday next, the 11th inst., at ——. Should you feel disposed to kindly send us some samples of your famous poisons, &c. (!), we would give them a prominent place on our advertisement-stall, and you will greatly oblige." The above is an extract from what looks like a *bonâ-fide* application made by a lady to "F. Newbery, 1 King Edward Street, Newgate Street." Messrs. Newbery, not knowing which famous poisons would prove most attractive at a Zenana bazaar, have let the opportunity go by; but we are yet waiting for developments of this singular desire for something deadly.

NOTES UPON ABSOLUTE ALCOHOL.

By PETER WYATT SQUIRE.

ABSOLUTE alcohol, as described in the appendix to B.P. 1864, was obtained by a combination of the processes contained in the Edinburgh and Dublin Pharmacopœias, with a standard purity of 99.6 per cent. No change was made in 1867, except to introduce a preliminary dehydration with carbonate of potash previous to distillation over quicklime. In 1885, when absolute alcohol was transferred from "Articles employed in Chemical Testing" to the "Materia Medica," the quicklime was replaced by chloride of calcium (a rather questionable improvement), and the standard of purity lowered to a permissible 98 per cent.

Besides its use as a preservative for chloroform, absolute alcohol has only one other official application—viz. the preparation of liquor sodii ethylatis—and it may be inferred that the strength and tests were fixed with this latter object directly in view. It has, however, been pointed out (THE CHEMIST AND DRUGGIST, 1885, page 657) that the ethylate-of-sodium solution is sure to contain some proportion of ordinary sodium hydrate, and it is evident from a very simple calculation that if the alcohol contains the 2 per cent. of water allowed by the Pharmacopœia it will be sufficient to at once convert nearly half of the sodium into hydrate.

As liquor sodii ethylatis is scarcely, if ever, used, the question of absolute alcohol may be considered by itself, and the following notes on the various proposed methods of testing (arising out of some experiments in connection with a new edition of the "Companion") may be of sufficient interest as to justify their appearance here:—

1. *Specific Gravity*.—This, of course, is the simplest test, but to be of much use it should be correct to the third decimal place. In absence of a Westphal balance, the most ready method is probably to weigh 250 c.c. with a balance turning to 0.2 gramme. In any case the temperature must be accurately noted, and the volume of the measuring flask checked by weighing with distilled water, as the graduations are not always correct.

2. *Anhydrous Sulphate of Copper*.—According to the B.P. an alcohol at 797–800 (99 to 98 per cent.) "does not cause anhydrous sulphate of copper to assume a decided blue colour, even after the two have been well shaken together." These directions are far too indefinite to be of much value, the blue colour depending so much upon the proportion of copper sulphate used and the time during which it is left in contact. Contrary to what might be expected, a fairly large quantity of the reagent shows the blue more quickly than a small quantity, although the latter after a time takes a deeper colour.

Using .5 gramme copper sulphate to about 7 c.c. of alcohol in a 2-drachm or $\frac{1}{2}$ -oz. stoppered bottle the following reactions are given:—

95 per cent. alcohol, a distinct coloration in	1 minute
97 " " " "	4 minutes
98 " " " "	10 "
98½ " " " "	1 hour
99 " " " "	24 hours

The B.P. test should, therefore, read, "8 grains anhydrous sulphate of copper shaken in a small stoppered bottle with 2 drachms of the alcohol should not show a blue coloration within seven minutes."

Permanganate of Potassium.—In Allen's "Commercial Organic Analysis," vol. i. p. 55, it is said: "The presence of as small a proportion as 0.5 per cent. of water in alcohol is indicated by the pink colour assumed by the liquid on introducing a crystal of potassium permanganate." This test is

almost too delicate for any ordinary make of alcohol—99 per cent. being strongly tinged with red—but the reduction of the specific gravity by .001 (.3 per cent.) is sufficient to prevent solution, and consequent coloration, so that in some cases it may be useful. It is unsafe, however, to trust to a "crystal" of permanganate, as these are occasionally covered with a thin film of oxide, invisible to the eye, but sufficient to prevent the coloration of alcohol containing 2 or 3 per cent. of water. The crystal should be powdered, or at least well crushed, before placing it in the alcohol.

Bisulphide of Carbon.—The solubility of alcohol in bisulphide of carbon was made the subject of a paper by two German writers, an abstract of which will be found in the *Year-Book of Pharmacy*, 1871, p. 157, with a table showing its application to the determination of water in the alcohol. With *absolute* alcohol bisulphide of carbon mixes in all proportions, but when the alcohol contains water a turbidity is produced when a certain proportion of bisulphide is added. The writers of the paper, however, do not seem to have worked with an anhydrous alcohol, so that their figures are incorrect.

A much more exact method of utilising the reaction is to add to 1 c.c. of the alcohol under examination 5 c.c. of carbon bisulphide, and note the temperature at which, if clear, it becomes turbid on cooling, and, if turbid, at which it becomes clear on warming.

In working this test, the following figures may be taken as a guide:—

95 per cent. alcohol, 88° F.
97 " " " 60° F.
98 " " " 43° F.
98½ " " " 33° F.
99 " " " 21° F.

For accuracy, delicacy, and easy application this test is unsurpassed. The only objection is the disagreeable smell of commercial bisulphide of carbon, even when "redistilled." This, however, is removed to a great extent by prolonged digestion over shreds of bright copper foil.

One would like to see bisulphide of carbon in the B.P. appendix. Besides its usefulness as a test for water in lard, lanolin, iodoform, &c., it is the best test for precipitated sulphur, the quantity of impurity being at once evident on shaking the two together.

As one of the most common uses of absolute alcohol is as a dehydrating agent in microscopical work, previous to "clearing" in some essential oil or hydrocarbon, it may be noted that nothing below 96 per cent. will clear into xylol or benzol, or below 95 per cent. for unoxidised cedar oil. The strongest spirit at present commercially obtainable by direct rectification is just short of this—viz., 69° overproof, equal to 94 per cent. alcohol, sp. gr. .811–.812.

DYSPEPSIA SPECIALIST (irritably): "But, madam, you must chew your food. What were your teeth given you for?"
Female Patient (calmly): "They weren't given to me. I bought 'em."

MR. THOMAS SMITH, one of the founders of the well-known business of T. & H. Smith & Co., manufacturing chemists, Edinburgh, died at his residence Heriot Hill House, Edinburgh, on Wednesday evening. Born eighty-six years ago, Mr. Smith, when a young man, studied medicine at Edinburgh, and during the first visitation of cholera to that city in 1831–32 he was a district assistant. He never practised afterwards, but in the latter year, along with his brother Henry, he started the business which still bears his name. Henry died eighteen years ago, and Thomas retired from the business in 1880. His interest in pharmaceutical chemistry did not cease, however, and various contributions with the signature of T. & H. Smith were from his pen, and the result of his researches. One on xanthaline was read before a meeting of the North British Branch so recently as March 15 of this year. His health had been failing for some time past, but it was only lately that his illness assumed a serious character.

Practical Notes and Formula.

POMADES.

SOXILLET recommends the following formula for a pomade-base, which is said to possess excellent properties:—

	Parts
Lard	300
Hard paraffin	20
White wax	10

Melt and stir until cold.

For yellow pomade yellow wax may be employed, with the addition of gamboge or palm oil to colour. A small quantity of alkanet gives a rose colour. A green hue may be obtained by the addition of chlorophyll in the shape of spinach or grass digested in the hot fat. The following mixture is an excellent perfume:—

	Parts.
Oil of bergamot	10
" lemon	5
" clove	1
" cinnamon	$\frac{1}{2}$
" thyme	$\frac{1}{3}$
Otto of rose	5

Mix.

PERFUMED NAPHTHALIN CAMPHOR.

Naphthalin	84 oz.
Camphor	28 "
Coumarin	5ss.
Nerolin	gr. xv.
Nitrobenzol	5iij.

Mix.

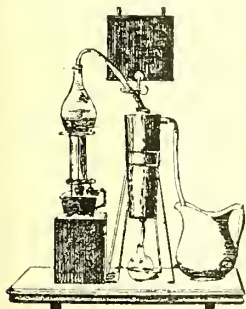
BROWN FLOOR-STAIN.

Glue	1 lb.
Water	1 gallon
Bichromate of potash	$\frac{1}{2}$ oz.
Water-soluble aniline brown	$1\frac{1}{2}$ "

Soften the glue in the water, and dissolve by the aid of heat. Dissolve the other ingredients in $\frac{1}{2}$ pint of water, and add to the glue solution. Apply hot, and when dry varnish.

AN UPRIGHT CONDENSER.

At a recent meeting of the North Carolina Pharmaceutical Association, Mr. S. J. Hinsdale (Fayetteville) described the apparatus here sketched.



The reservoir has a capacity of 1 gallon. The tin case holding the glass conveying-tube is 12 inches long, $4\frac{1}{2}$ inches diameter at the top and 3 inches diameter at the bottom. The glass condenser enclosed is made of thin glass tubing of $1\frac{1}{4}$ inch diameter. It is 10 inches long, and is drawn out at each end to tubes of $\frac{1}{4}$ inch inside diameter. The upper end is curved so as to be adjusted to the rubber tube from the flask. The rubber tube from the reservoir is connected with a glass tube which goes nearly to the bottom of the tin case, and is furnished with a pinch-cock. The rubber tube connected with the top of the tin case carries off the warm water. The glass tube connected with this rubber tube should be a little larger than the glass tube which supplies the cold water. Pressure on the pinch-cock supplies the tin with cold water while the warm water runs off. Ice-water may be used in the reservoir if desired. The inside of the tin case is covered with shellac varnish.

CARE IN DISPENSING.

ONE can never be too careful in dispensing to see that the utensils employed are perfectly clean. A speaker at a recent meeting of the Alumni Association of the Philadelphia College of Pharmacy cited an instance in point which occurred at his own store (*Alumni Report*). A prescription came in for veratrine ointment. To powder the alkaloid, his clerk used a glass mortar having a very slight imperfection

in the bottom of the bowl, and a minute crevice in the pestle. The mortar was then thoroughly washed out with alcohol and soap and water, and the ointment made on a slab. Shortly after this a prescription for ammonium carbonate, chloroform-water, and mucilage of acacia came in to be filled. It was mixed in this same glass mortar. The finished preparation was given in teaspoonful doses to a child, causing emesis at once. The child recovered. The prescription was brought back by the physician for examination and was found to have the characteristic taste of veratrine, and the crevices in mortar and pestle were blamed for holding a minute quantity of this alkaloid from the making of the veratrine ointment.

SOAP-BUBBLE SOLUTION.

ACCORDING to a communication recently made to the Academy of Sciences the following solution affords very thin and permanent bubbles:—

Yellow resin	10 grammes
Carbonate of potash	10 "
Water	100 c.c.

Boil until completely dissolved, and before use dilute the solution with four times its volume of water. It is somewhat difficult

TO FLOAT SOAP BUBBLES UPON CARBON DIOXIDE,

because, if you managed, after a score of trials, to free your bubble from the pipe on which you blew it, the bubble usually bursts the moment it touches your heavy gas. Mr. Newth lets us into the secret in his recent book. You must remove every trace of hydrochloric acid, which is carried over with the gas, by washing, the presence of this acid being fatal to the life of a soap-bubble.

SHAMPOO-LIQUIDS.

THE following are American formulae which we quote from the *Pharmaceutical Record*. Mr. G. H. Dubelle is the originator of them:—

Elite Shampoo.

Hungary water	5xvj.
Bay rum	5viij.
Tincture of quillaia	5iv.
Rosemary-water	5iv.
Glycerine	5ij.
Carbonate of ammonia	5j.
Borax	5j.
Tincture of cantharides	5j.

Mix.

To the rosemary-water, in which has been dissolved the borax and ammonia, add the rest of the ingredients, and mix thoroughly by agitation. The hair is moistened with the liquid, and rubbed vigorously to produce a copious lather.

Salicyline Shampoo.

Rosemary-water	5xviij.
Rose-water	5viij.
Bay rum	5vj.
Carbonate of ammonia	5ss.
Carbonate of soda	5ss.
Salicylic acid	5iiss.

Mix.

Prepare and use as the preceding.

Tonic Shampoo.

Tincture of quillaia	5x.
Eau de Cologne	5iv.
Glycerine	5iij.
Fluid extract of jaborandi	5iv.
Sulphate of quinine	5ss.
Orange-flower water enough to make	5xxxij.

Mix.

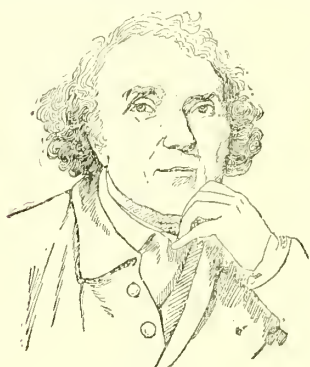
Dissolve the quinine in the eau de Cologne and tincture of quillaia with the aid of heat; then add the remaining ingredients, and filter if necessary.

[We should prefer 2 grains of pilocarpine hydrochlorate to the jaborandi extract, which is messy.—ED. *C. & D.*]

BLAUD'S PILL IN POWDER FORM has been introduced by a German firm. It is green in colour, and is made into a mass with water.

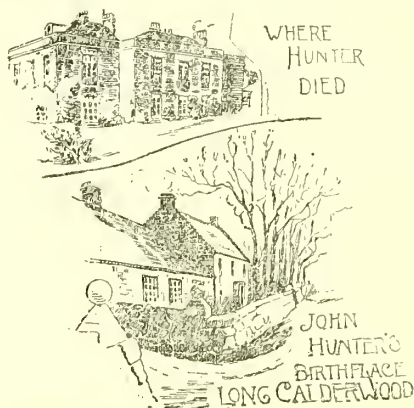
JOHN HUNTER.

THE Royal College of Surgeons has been celebrating the centenary of the birth of John Hunter, as well as the jubilee of the institution of its fellowship. A large number



JOHN HUNTER.

of Hunterian relics have been exhibited, including a fine series of portraits of the Hunter family. Some of these have been lent, but the Royal College of Surgeons is itself the fortunate possessor of the celebrated portrait of John Hunter by Sir Joshua Reynolds. Although the founder of scientific surgery, John Hunter was of very humble origin, and was no doubt in a large measure self-taught. He was born in the parish of Kilbride, East Lanarkshire. The house is still standing, and remains pretty much as it was in Hunter's time. He was the youngest of ten sons. As a youth he is said to have worked as a carpenter in Glasgow, and, not-



withstanding his attainments as a surgeon, it is certain that to the last he had very little acquaintance with the dead languages. He came to London about the age of twenty, and at five-and-thirty was not only settled in practice as a surgeon, but was also lecturing on anatomy. At the age of sixty-five he died suddenly, while attending a meeting of the Board of Governors of St. George's Hospital, and the sofa on which he breathed his last has been lent by the hospital authorities for the exhibition. At the time of his death Hunter occupied a substantial residence at Earl's Court, where his wife gave fashionable receptions. Mrs. Hunter, who had been a Miss Home, was in her way a remarkable woman. She had some reputation as a poetess; her songs were set to music by Haydn, and at least one of them—"My mother bids me bind my hair"—is still popular.

TRADE-MARKS APPLIED FOR.

ANY person who has good grounds of objection to the registration of any of the following marks should at once communicate with Sir Reader Laek, Comptroller-General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

(From the "Trade Marks Journal," July 12, 1893.)

"VAP AIR PURIFIER," device of cup sending out vapour, and other wording; for disinfecting-powder. By L. Desborough, 146 Chatsworth Road, Clapton Park, London, N.E. The essential particular is the device. 173,238.

"FORBLOOMER"; for patent medicines. By Nature's Blood-former Co. (Limited), Oatlands Chemical-works, Meanwood Road, Leeds. 173,289.

"SWEETLOW CREAM"; for a toilet preparation. By Margaret V. Arnold, 96 Eaton Terrace, London, S.W. The essential particular is the word "Sweetlow." 172,247.

"BAR NONE" and device of horse with rider clearing five-barred gate; for perfumed soap. By Joseph Watson & Sons, Whitehall Soap-works, Leeds. The essential particular is the device. 172,523.

"BARIGOL"; for a preparation for the toilet. By G. C. Owen, 73 Archway Road, Highgate. 173,146.

(From the "Trade Marks Journal," July 19, 1893.)

Circular and cinquefoil device containing spray of Forget-me-not, and wording; for a cough-mixture. By C. E. Haggerty, Russell House, Charlton, S.E. The essential particular is the device of spray of Forget-me-not in cinquefoil. 172,301.

Device of John Bull standing by table containing bottles, holding a bottle in each hand; for glass bottles. By Johnsen & Jørgensen, 5 Savage Gardens, London. The essential particular is the device. 172,292.

"HIPPOEUTHEN," on scroll, and other wording, and device of horses; for a food for horses. By G. Van Abbott, trading as The Hippoeuthen Co., 6 Duke Street Mansions, London. The essential particular is the combination of devices. 172,647.

"ONDINE," and device of man with the sun for head, seated in bath, and wording; for perfumery products, dentifrices, soaps, toilet-waters, &c. By La Société Anon. des Amidonniers de France, Marquette-Lille (Nord), France. The essential particulars are the device and the word "Ondine." 172,979.

New Companies.

PORT TENNANT CHEMICAL COMPANY (LIMITED)—Capital, 3,000*l.*, in 10*l.* shares. Objects: To carry on the trades or businesses of chemical manufacturers. The first subscribers (who take one share each) are: F. E. Finlayson, 4 Cambrian Place, Swansea, analyst; A. Cory, Skebby, Swansea, merchant; W. W. Holmes, 31 Brooklands Terrace, Swansea, accountant; E. S. Isaac, Finsbury Terrace, Swansea, clerk; C. Cory, Uplands, Swansea, merchant; P. Kneath, Montpelier Terrace, Swansea, oil merchant; C. W. Deeley, Victoria Terrace, Swansea, accountant. There shall not be less than three nor more than five directors, and the first shall be elected by the subscribers. Qualification, 50*l.*; remuneration, 25*l.* per annum each, and such further sum as the company may determine.

SEDWAY'S TROVATOLO (LIMITED)—Capital, 25,000*l.*, in 10,000 preference and 15,000 ordinary shares of 1*l.* each. Objects: To acquire an invention of H. J. Sedway for a "medical compound," and to carry on any business connected with the article known as Trovatolo. The first subscribers (who take one share each) are:—T. E. Mashiter, 208 Portland Road, South Norwood, S.E., accountant; F. J. Griffin, Battersea, clerk; T. Mercer, Westbourne Square, W., clerk; F. Noble, Victoria Park, N.E., clerk; H. Roy, Rushmore Road, Clapton, bookkeeper; C. Christey, 480 Tressillian Road, S.E., colonial broker; G. N. Somatt, 38 Fenchurch Street, E.C., colonial broker. The number of directors shall not be less than three nor more than five; qualification, 100*l.* shares; remuneration, 7½ per cent. on all the profits, after the payment of a 7-per-cent. dividend, divisible in such a manner as the board think fit.

SHE: "You won't object to having my dear mamma live with us after we are married, will you?" He (a young physician): "Not at all. In fact, she'll be most welcome." "I'm so glad you feel that way." "Yes; you see, she is always ailing, and I really need somebody to experiment on."

Patents.

Following applications for Patents have been registered at the Patent Office.

Aërated-water Apparatus.—9,242.—May 9, 1893.—W. Durrant. Calhnggi screwed stoppered bottles with aërated or other liquid.

Ammonia Carbonate.—7,846.—April 18, 1893.—C. Raspe.

Antiseptic Material.—7,038.—April 5, 1893.—S. Pitt. "Formalin." (*The Chemische Fabrik auf Actien vorm. E. Schering, Germany.*)

Cattle Food.—6,974.—April 4, 1893.—F. Ursin.

Chemicals.—6,738.—March 30, 1893.—T. H. Copley & D. Jones. Acetic acid and acetates from pyroligneous acid and pyrolignates with formation of sulphides, sulphur, and other products.—6,960.—April 4, 1893.—M. Prentice. Nitric acid.—7,512.—April 12, 1893.—J. Brock & F. Hurter. Permanganates of soda or potash from manganates of soda or potash.—8,902.—May 3, 1893.—M. Prentice. Nitric acid, muric acid, &c.—9,271.—May 9, 1893.—G. S. Albright & J. J. Hood. Manganese peroxide.

Condensing-apparatus.—9,403.—May 10, 1893.—J. Schmittidiel.

Cream of Tartar.—9,028.—May 5, 1893.—Sir J. B. Lawes, Bart.

Disinfectants.—6,953.—April 4, 1893.—P. Molyneux & G. R. Potts.

Embrocation.—7,461.—April 12, 1893.—J. H. Harrison.

Emulsions.—8,196.—April 24, 1893.—H. Helbing.

Eucalyptus Oil.—6,778.—March 30, 1893.—E. Prince & The Tasmanian Eucalyptus Oil Company. Improved means to facilitate the evaporation of eucalyptus and other volatile oils.

Feeding-bottle Requisites.—6,152.—March 22, 1893.—M. J. Daniels. Nipples for infants' feeding-bottles.—6,450.—March 27, 1893.—T. Pickup. Suspender for feeding-bottles.

Feeding-teats.—8,697.—May 1, 1893.—P. A. Gentile.

Filters.—6,043.—March 21, 1893.—G. H. Moore.—7,379.—April 11, 1893.—W. J. H. Adam.—7,648.—April 14, 1893.—H. F. Jouffroy.—9,083.—May 6, 1893.—Baron L. F. S. de Vaxoncourt & C. P. Ehmman.—9,147.—May 8, 1893.—J. Bouvier.—9,387.—May 10, 1893.—B. Mackay.

Fly-papers.—8,501.—April 27, 1893.—R. W. C. Strong.

Hyperenia (a Medicine).—9,328.—May 10, 1893.—E. Duff.

Indigestion Remedy.—8,348.—April 25, 1893.—P. F. J. Mowis.

Inhaler.—5,902.—March 20, 1893.—F. T. Bond.—6,232.—March 23, 1893.—R. Roch-Brault.—8,025.—April 20, 1893.—F. W. Leviege. Inhaling-apparatus.—8,354.—April 25, 1893.—F. W. Leviege. Inhaling-apparatus.—8,644.—April 29, 1893.—Q. H. Stebbings. Inhaler and poultice-heater combined.

Insect-powder.—7,821.—April 18, 1893.—E. Lloyd.

Insecticide.—7,065.—April 6, 1893.—J. Craven.

Iron Salts.—6,815.—April 1, 1893.—P. Hart.

Lozenges.—9,238.—May 9, 1893.—F. W. Warrick.

Medicines.—19,751.—November 2, 1892.—E. Smith.

Menthol Cones.—20,548.—November 14, 1892.—F. Keller.

Mineral-water Boxes.—22,300.—December 6, 1892.—R. Robinson.

Night-lights, &c.—18,680.—October 19, 1892.—J. Yonge.

Ointment.—20,614.—November 15, 1892.—W. Boddy. Preparation for the treatment of hæmorrhoids.—2,526.—February 4, 1893.—J. Edmunds. Ointment for the cure of

eczema and other skin diseases.—7,771.—April 17, 1893.—E. Andrews. Ointment for eczema.

Perfume-bottle.—2,456.—February 3, 1893.—R. B. Breidenbach.

Pharmaceutical Compounds.—20,497.—November 12, 1892.—P. A. Newton.—4,191.—February 25, 1893.—O. Imray.

Pharmaceutical Products.—2,035.—January 31, 1893.—W. R. Dodd & C. Hanbury. Pills, pastilles, and lozenges.

Pill-coating Apparatus.—5,493.—March 14, 1893.—W. P. Thompson. Coating with sugar or gelatine.

Piperazine.—5,265.—March 10, 1893.—S. Pitt.

Piperazine and its Salts.—5,320.—March 11, 1893.—H. E. Newton.

Respirators.—19,319.—October 27, 1892.—S. E. Firminger.—20,945.—November 18, 1892.—H. Hopkins, C. Clegg, and W. E. Pitt.—21,214.—November 22, 1892.—J. E. Gower and D. A. Reid. Combined thermic and antiseptic respirator.—22,652.—December 9, 1892.—J. T. Atkins. Medicinal compound for use in connection with respirators.

Respirators and Inhalers.—6,636.—March 29, 1893.—L. Kamm.

Salols.—6,749.—March 30, 1893.—C. Kolbe.

Sanitary Powder-box.—23,183.—December 16, 1892.—A. H. Jakins.

Seltzogenes.—509.—January 10, 1893.—E. de Pass. Seltzogenes and like apparatus.

Shaving-cream.—3,643.—February 18, 1893.—J. Pate.

SPECIFICATIONS PUBLISHED.

Copies of the following may be obtained from the Patent Office, by post on application by card obtainable at any post office for 8d.

1892.

- 4,497. Willcox. Piperazine.
- 4,669. Seton. Bronchitis, &c., kettle.
- 7,662. Hughes. Bottles for aërated liquids.
- 7,782. Willcox. Periodides of phenols, &c.
- 7,925. Vint. Menthol cones, &c.
- 8,439. Caddell. Filters.
- 8,440. Caddell. Filters.
- 8,764. McKay. Water-filters.
- 8,773. Redfern. Filtering saccharine, &c.
- 8,840. Orrock. Feeding-bottles.
- 10,193. Galloway. Aërated-water machinery.
- 10,350. Erdmann. Remedy for syphilis, &c.
- 10,381. Lake. Chemical preparation.
- 11,275. Raymond. Disinfecting, &c., compound.
- 11,386. Lorrain. Filters.
- 11,464. Nicholson. Inhaling-apparatus.
- 12,622. Hampton. Filters.
- 13,276. Willmott. Abdominal trusses.
- 20,377. Sleight. Cough-mixtures.
- 22,605. Zacharias and Grunwald. Soap.
- 22,681. Stanton. Petroleum soap.
- 22,817. Rotondi and Michela. Acetic acid.
- 23,304. Thomas. Stoppering bottles.

1893.

- 732. Turck. Feeding-bottles.
- 1,298. Buisine. Ferric chloride.
- 1,305. Maussion. Stoppering bottles, &c.
- 1,347. Micheel. Siphons.
- 1,733. Rees. Disinfecting-fluid.
- 2,047. Hibbert. Dentistry-tools.
- 2,085. Dodd & Hanbury. Pills, pastilles,
- 2,142. Fowler. Liquid-dispensing apparatus.
- 2,148. Heibling. Potash, alum, &c.
- 3,293. Fowler. Liquid-dispensing apparatus.
- 4,767. Lederer. Caustic alkalies.

THE MANUFACTURE OF CREAM OF TARTAR.

AT the request of the California State Board of Viticultural Commissioners, the United States Government has obtained from its consuls in the wine-producing districts of Europe information concerning the manufacture of cream of tartar, which is said to be assuming, on the Pacific slope, the proportions of a fair-sized industry. As regards France, the principal wine-growing country in Europe, the Consul in Marseilles reports that the manufacture of cream of tartar in Marseilles was abandoned almost entirely in 1877, when a duty of 10c. per lb. was imposed upon the drug in the United States, who had been the principal customers of Marseilles. As argols remained duty-free in America, the Marseilles works could no longer compete in the cream-of-tartar business, and were either shut up altogether or transferred to the States. In other parts of France cream of tartar can be made to sell with a profit to the maker at the rate of 175f. per 100 kilos. (on the basis of 125f. per degree of bitartrate of potash in the crude argol), while the American makers are able to command in their home market nearly 25 per cent. above that figure, in consequence of the protective duty, the loss falling in the first place upon the American baking-powder consumers. The American wine-growers, on the other hand, are obliged to sell their by-products (argols and lees) at prices which can compete with those of the European sellers, as there is no duty upon these goods. Since the time when most of the French cream-of-tartar factories were closed, the whole of the American demand for cream of tartar and tartaric acid has been supplied by four large factories, viz.:—Powers & Weightman, Philadelphia; the Tartar Chemical Company, Jersey City; the Union Chemical Works, New York; and Charles Pfizer & Co., New York.

The Consul in Montpellier gives a very interesting account of the manufacture of cream of tartar, as carried on in his district, in the course of which he observes:—

The bitartrate of potash of commerce comes from the purification of the impure tartrates and the lees that the vigneron (wine-grower) collects after the vintage. In Europe, these subsidiary-products supply him with no contemptible revenues.

It is generally estimated that 100 kilos. of unfermented grapes contain about 900 grammes of tartar, or 0.9 per cent., of which about half occurs in the must in a state of solution, while the rest is present in it in crystalline form, either suspended or as a precipitate. As the wine ferments it becomes alcoholic, whereby the solubility of the bitartrate is decreased, and a greater proportion of it is precipitated.

THE EFFECT OF WINE-DISEASE ON TARTAR.

One of the most striking effects of the diseases of wine (such as *tourne*, *pousse*, &c.) is the complete disappearance of the tartar, which is split up by the bacteria of fermentation into lactic acid, butyric acid, carbonic acid, &c. In some cases these bacteria attack the crystals on the walls of the tanks, or those that have fallen to the bottom with the lees. In this case the vigneron tells you that the wine has "eaten its lees." The purest tartar is taken from the interior of the cask, while that which falls to the bottom, mixed with the lees, is more impure, and of comparatively little value.

If the new wine is kept in cement or glass-lined tanks (very common in Italy, Spain, and part of Portugal), the incrustation of tartar on the walls is much less, while the quantity that mixes with the dregs is very much greater than is the case with wooden casks. Sometimes well-washed wooden sticks are suspended in the large tanks, in order to facilitate the deposit of pure tartar, which brings a higher price than that paid for lees. The crystallisation along the interior of the cask is always of the same thickness throughout. The casks made from Burgundy staves are more favourable to the formation of argol than the Austrian or American casks.

In the South of France the amount of tartar taken from the interior of the tanks is usually estimated at 200 grammes for each hectolitre of capacity annually. This, at the rate of 1.20 franc per kilo., largely pays the interest on the

cooperage, and is one of the many reasons that have decided the southern wine-growers to abandon the old cement vats.

The harvest of tartar (*ditartrage*) takes place yearly if the incrustation is sufficiently thick. It can be done at all times of the year. The only governing principle is convenience. As soon as the tanks are empty the vigneron notifies the men who make tartar-collecting their profession. These are the middlemen, and they buy the tartar from the vigneron. The instrument used is a sharp adze.

The richness of tartars varies from 40 to 80 per cent. in pure salt of potash, and is, as a mean, from 50 to 60 per cent. The amount of tartrate of lime varies from 3 to 8 per cent.

THE DISTILLATION OF RESIDUES.

Tartar is also obtained from the distillation of the residues of the wine-press. It is safe to say that this residue of stems, skins, &c., known as "pomace," still contains 2 or 3 per cent. of tartar. This pomace is macerated in boiling water, to saturate the vinasse well. Then the hot solution is drawn off and run into barrels, in which shavings, sticks, &c., have been put. On cooling, the tartar deposits on these.

Tartar of lees is extracted from the dregs after the first racking-off. When dry the dregs are saturated with boiling water in a copper vessel containing 50 or 60 litres. The point of saturation is readily seen from a film which forms on the top.

The crude tartar obtained from the casks is refined in special cream-of-tartar refineries. The cost of such an establishment capable of turning out half a ton a day is about 4,000*l.*, and will occupy ten men all the year round. Many cream-of-tartar works also turn out tartaric acid, but the cost of a plant for tartaric-acid making is much greater than that of cream production. A tartaric-acid plant capable of producing half a ton a day costs 20,000*l.* and will occupy twenty men.

THE MANUFACTURING PROCESS.

The refining of cream of tartar is a very simple affair indeed, while the manufacture of tartaric acid is very complicated. The establishments differ very much, but the best seen in France, Italy, and Spain are somewhat after this fashion:—

A large wooden tank, sometimes copper-lined, is partly filled with water, into which the crude tartar or lees is thrown. Steam-pipes bring this to boiling, and, when saturation is reached, the whole liquid is drawn off into tanks lined with lead, which hold 80 hectolitres. Here it is allowed to cool. To facilitate crystallisation, slats are placed across the top. From these slats hang long strips of lead. When the liquid is thoroughly cool, the tank is emptied by means of a steam-pump. As the liquid still contains a considerable quantity of tartar, this is put back into the boiler and re-saturated. As this liquid keeps charging itself with organic impurities, it leaves in the bottom of the vats a very evil-smelling deposit. The man who enters the recently-emptied cask or vat is always paid more than the others. The cream of tartar is first produced in the form of dirty reddish crystals of about the size of a pea. These are dried in the sun in shallow trays with linen bottoms, and are redissolved and re-crystallised till they are perfectly white.

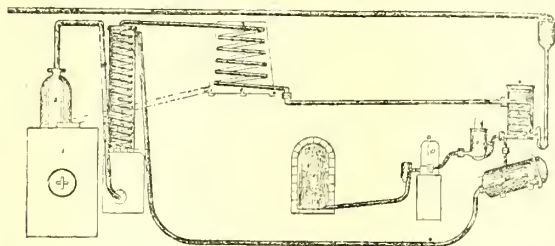
ITALIAN CREAM OF TARTAR.

From Italy there are three reports, from the Consuls at Leghorn, Catania, and Florence. The first-named states that cream of tartar is not manufactured to any extent in his district, and there are no exportations of it. Of argols, about 840,000 are shipped to the United States annually. The grape pomace left after extraction of the juice is only used as a fertiliser.

In the Florence district there are several chemists who gather on their own property small quantities of raw tartar and refine it every year. The largest production of cream of tartar in Italy is in the southern provinces. At San Antimo, in the province of Naples, for instance, almost the entire population is occupied in various ways in the traffic of tartar and the manufacture of cream of tartar.

In Catania there are five wealthy cream-of-tartar works, who carry on their trade from September or October (the commencement of the vintage) to the beginning of May.

The manufacture of cream of tartar and grape-alcohol in Catania is described as follows:—



The process employed to obtain cream of tartar is a simple one. The following machinery is necessary to start an establishment:—

(1) A boiler to be filled with lees, into which, at the same time, a fixed quantity of water is to be poured, in the proportion of four times the weight of the lees to be boiled and worked.

(2) A chamber for receiving the steam or vaporous alcohol coming out from the boiler.

(3) A pipe which, from the upper part of the steam-chamber, leads the vaporous alcohol into the worm column (No. 4).

(5) A pipe from the worm column leading the vaporous alcohol into a closer receptacle, called "scaldavino" (wine-warmer), No. 6.

(7) Another pipe ending in the rectifier-refrigerator-condenser (No. 8).

(9) A small brass box with a glass bell for detecting the alcohol-pressure (No. 10).

(11) An apparatus for measuring and recording the quantity of alcohol produced. (This device is compulsory in Italy, where a tax is paid to the Government.)

(12) A receiver of weak alcohol, to be transferred again to the serpentine column (No. 4).

These are the sole instruments and apparatus necessary in an establishment, besides a supply of wooden tubs to be used in obtaining the crude tartar.

To produce alcohol, 100 kilogrammes of lees with 400 litres of water are put in the boiler for six hours. The warm steam developing from the ebullition automatically reaches the "scaldavino" and then the refrigerator, being partly cooled in the former and quite cooled in the latter. The water remaining in the boiler, together with the boiled wine-lees, is poured in wooden tubs, which have previously been filled with full-grown and dry asparagus, bound in large bundles. The warm water and lees remaining in the boiler are poured on them, letting the mass rest undisturbed for at least four hours, during which, becoming cool, the cream of tartar will be deposited on the asparagus-stalks. It is then time to take out the stalks and place them in empty tubs, allowing the necessary time to dry. This done, the raw cream of tartar is removed from the stalks (to which it adheres) by an undulatory movement of the hand from left to right. The cream of tartar, being so gathered, is put to dry, as manufacturers in Italy usually sell their product in a crude state.

The water remaining in the tubs contains some uncrystallised sediment, and can be put to boil again, together with a fresh supply of lees.

SPAIN AND GERMANY.

In Spain there are but few cream-of-tartar factories. One was commenced in Seville some six years ago, by a German, but was given up after a loss of 2,000%. Cream-of-tartar manufacture is paying less every year, because the article is always getting lower in price. Meanwhile the other substances, such as acids, cognac oils, &c., obtained from lees are coming more into demand, and therefore the lees are largely exported from Spain to Germany or other countries to make acids and cognac oils.

In Cadiz, the Consul reports, wine lees and grape ponnace were, until a decade ago, considered as waste by the wine-producers, but at present these products are all exported to France.

From Germany there are three reports. The Vice-Consul at Kehl, in Alsace, states that in that province, which is the

most important wine-growing district in Germany, the well-to-do wine-growers do not remove the argols deposited in the barrels, and the wine, when it grows older, re-absorbs these deposits and is thereby improved in quality. Poorer wine-growers sell the argols to the druggists, who refine them. The tartar thus obtained is used in dyeing.

The lees are generally distilled, and yield a brandy much liked for home use. The wine-makers in the Palatinate are utilising their by-products to a considerable extent in the manufacture of tartaric acid, and also cream of tartar.

Medical Gleanings.

THE GOLD CURE.

DR. CHAPMAN, some time physician to a sanitarium for drunkards, describes, in the *Chicago Medical Recorder*, the details of the so-called "gold cure." The patient receives an injection of apomorphine, and then he is treated to his favourite drink, and, "soon associating the intaking of the whisky with the subsequent disagreeable sickness and vomiting, he acquires a positive disgust for the liquor, and is not able to keep any on his stomach."

STRYCHNINE-POISONING.

A NEW SOUTH WALES medical man (Mr. T. J. Henry) communicates to the *Lancet* particulars of a case of strychnine-poisoning in which death resulted 8½ hours after the poison was taken. The victim was a man of 46, who took as much strychnine as would cover a shilling. The doctor was called in as soon as possible thereafter, and at once washed out the man's stomach, afterwards administering chloral and bromide, and giving chloroform by inhalation. The treatment had a good effect at first, but at the last a dreadful paroxysm bent the man back, he became almost black, and when the sudden relaxation occurred he was found to be dead.

FORMANILID *versus* ANTIFEBRIN.

BOKAI writes in the *Cent. f. d. Med. Wiss.* No. 17, 1893, that the action of formanilid is at least as efficient as that of antifebrin in soothing neuralgic pains and in reducing fever, while it is much less liable to cause dangerous symptoms. In neuralgic headache, lumbago, and similar painful affections it may be used in doses of from 4 to 7 grains daily. As an antipyretic it was tried with most favourable results in rheumatic, typhoid and other fevers. The fall of temperature was almost immediate, and the beneficial effect lasted from three to fourteen hours. It is recommended that where the temperature is under 102° F. not more than 2½ grs. should be given at a time, but when the temperature exceeds 102° as much as 4 grs. may be given.

Gazette.

PARTNERSHIPS DISSOLVED.

Elkington, E. A., Baddeley, C. E., & Morgan, T. W. S., under the style of Elkington, Baddeley, & Morgan, Newport and Gnosall, surgeons, apothecaries, and acconcleurs.

Peat, W. H., Peat, A. R., Peat, J. E., Devitt, A., & Niemann, F. G. B., under the style of Lewis & Peat, Mincing Lane, E.C., produce brokers; so far as regards F. G. B. Niemann.

Tippett, J. C., & Horne, A. D., under the style of Tippett & Horne Torquay and Newton Abbot, surgeon-dentists.

THE BANKRUPTCY ACTS [1883 AND 1890.

RECEIVING ORDER.

Steel, A. R., Dawes Road, Fulham, S.W., doctor of medicine.

ADJUDICATION.

Gibbins, James Burt, Mark Lane, E.C., chemical merchant and commission agent.

Photographic Notes.

PHOTOGRAPHIC PRINTING ON WOOD BLOCKS.

IN these days, as is well known, a great many engravers have the drawings photographed direct on to the wood; the following note is upon Professor Lanier's method, and will be found practical and useful:—The block is made ready with the following solutions, and the usual methods of making the block impervious to water by means of paraffin or shellac, and whitening, salting, and sensitising the surface, are all dispensed with, and the block only treated as follows:—

I.		III.	
Gelatine ..	1 grm.	Silver nitrate ..	10 grms.
Water ..	30-50 c.c.	Water ..	50 c.c.
II.		IV.	
Chloride of ammonium ..	10 grms.	Citric acid ..	30 grms.
Water ..	100 c.c.	Water ..	60 c.c.

These four solutions are all mixed in the following order with pestle and mortar:—I., 5 c.c.; II., 1 c.c., adding 5 grms. of zinc-white, after which rub up finely and add of III. 8 c.c., in small portions at a time, and by constant stirring; finally add of IV. 3 c.c. When all is well mixed add 1 c.c. of boiling water and coat the block with the help of a soft badger brush, first in parallel strokes, and when sufficiently set turn the block half round and go over the block again with the emulsion, which dries quickly. Printing is done from a reversed negative, and will require in direct sunlight an exposure of from five to ten minutes, or in a diffused light from fifteen to sixty minutes.

The block with the print on it is slightly washed in distilled water, and fixed in a solution of hypo or a combined fixing and toning bath; after washing the block must be subjected to the action of chrome alum, then washed and dried. The character of the picture depends much upon that of the negative and the length of exposure.

STRONG SOLUTION OF AMMONIA.

ALTHOUGH the common aqueous solutions of ammonia are sufficient for all ordinary purposes, cases arise where an alcoholic solution is needed. The drawback to the latter is the fact that it contains so much less ammonia than the aqueous solutions. Thus at 58° F., an 80-per-cent. alcoholic solution will only hold 19 per cent. of NH_3 . Methyl alcohol, however, dissolves an enormous quantity. M. F. Delépine states that a purified commercial alcohol containing less than 3 per cent. of acetene dissolves 40 per cent. of its weight.

SALTING AND SENSITISING PLAIN PAPER.

At a time when much exhibition work is printed on home-sensitised paper, the following formula will be helpful:—Boil 2 oz. of distilled water to which has been added 1 drachm of aqua ammonia. When boiling, saponify as much fine French resin as will neutralise the alkali; test with litmus. Of this solution filter out 1 oz., take 4 oz. of water, warm the same and add 6 grains of gelatine and 190 grains of ammonia chloride, previously dissolved in water. The bath should now be neutral; acidify till blue litmus reaction is decided, add citric acid, and make up the bath to 40 oz. Float paper on this bath for three minutes, then dry and float on 80-grain silver bath. This paper fumed for twenty-five minutes will print black, and toned with chloroplatinite of potassium will give engraving-black prints of great brilliancy.

GOLD RESIDUES.

THE most simple method for recovering the gold from toning-baths is by the employment of solutions of iron, which will throw down the gold very quickly, but as now so much silver chloride accompanies most gold deposits from photographic solutions it is wise, says the *British Journal of Photography*, "to re-dissolve the washed precipitate, precipitate again, dry, and weigh. The powder so obtained is nearly pure gold, quite good enough for chloride-making; the chloride may be roughly estimated as being equal to about double the weight of this brown gold-powder."

STELLAR PHOTOGRAPHY.

ASTRONOMERS have been engaged for some time past in preparing a chart of the heavens. Mr. G. S. Criswick, F.R.A.S., who recently read a paper upon the subject before the Greenwich Photographic Society, says that for the survey at present being carried out an aggregate of no less than 20,000 negatives will have to be supplied by the various observatories at work.

PLATINUM PRINTS IN BARTOLOZZI RED.

PLATINOTYPE-PAPER lends itself so much to varying tones of grey, brown, and sepia that Dr. Strakosch's method of securing a Bartolozzi red will be interesting. He writes in the *Phot. Rundschau*:—"To 1,000 c.c. of the developing-solution which is used for platinotype-paper with cold development add 100 to 200 c.c. (in some cases even more) of a 4-per-cent. solution of perchloride of mercury. The paper is printed sufficiently deep when it is developed in this bath, and the prints will acquire a brown tone. After fixing in hydrochloric acid and thoroughly washing, the prints are placed in the following bath:—

Water ..	500 c.c.
Uranium nitrate ..	5 grammes
Potassium ferrieyanide ..	1 gramme
Glacial acetic acid ..	30 grammes

In this bath the prints will attain at first a fine sepia tone, which will gradually become reddish, until at last the Bartolozzi red will be obtained."

A NEW HAND-CAMERA.

MESSRS. ARCHER & SONS, 43 to 49 Lord Street, Liverpool have just completed a new hand-camera which has certain novel features, such as double-extension leather bellows, capable of extending to 12 inches, and exceedingly useful when working with a long-focus lens, and side rack and pinion for focussing. To the front is attached one of the well-known "Thornton-Pickard" time and instantaneous shutters. The camera has a rising and swing front, an outside focussing index or register, a double swing back working in each case from the centre, and—what is one of the best features—a reversing back, which enables the operator to take photographs either way of the plate, using one finder and without turning over the camera. The dark slides are made to draw out and fold inside back of case. The camera can be fitted with turntable for tripod.

"LOMBERG" RAPID DRY PLATES.

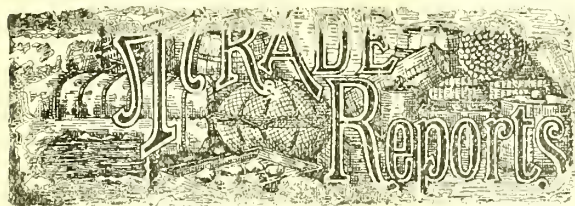
THESE plates are introduced into this country by Messrs. E. Stiepel & Co., 80 Bishopsgate Street, E.C. They give negatives of even density and great brilliancy and sensitiveness.

Business Changes.

MR. ARTHUR E. EKINS, pharmaceutical and analytical chemist, has purchased the business and goodwill of Mr. Henry Lewis, chemist and druggist, St. Albans, and has transferred it to his own premises at 7 Market Cross, St. Albans.

MR. E. A. HEARN, manufacturer of dispensing and other bottles, Eclipse Glass-works, Lea Bridge, Lower Clapton, has taken Mr. Sidney H. R. Wright into partnership, and the firm will henceforth trade under the style of Hearn, Wright & Co. Mr. Wright has been in the office of the firm for the past four years.

THE development of their business has compelled Messrs. A. de St. Dalmas & Co., medical-plaster manufacturers, of Leicester, to make a considerable extension of their premises, adding three new floors to the main building, besides altering and enlarging other portions. In making these alterations they have found it possible to provide a convenient mess-room for their employes.



Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., July 20.

BUSINESS is inexpressibly dull, and any transactions taking place are of the merest retail character. In face of any genuine and considerable consumptive demand, prices are maintained. It would be useless, say sellers, to cut down prices when there is nobody of consequence to buy. This week's drug-sales are exceptionally heavy. Seventeen catalogues were to be had on Wednesday, and several of them ran up to over a dozen pages. Senna, buchu, ipecacuanha, sarsaparilla, and benzoin, were the most voluminous articles. There was some good Cartagena ipecacuanha, and a big supply of the stemmy official drug, or, should we say, the official drug *plus* 20 to 40 per cent. of stem? It sold high, and retailers must now pay 1s. more for the drug. Owing to the vanilla sales coming first, drugs were not reached until noon to-day, and when we closed our book there were still three catalogues to go through.

Infants' Food.

At the sales to-day a large lot (190 tins) of Nestlé's food was offered. It was packed in 1-lb. tins, and labelled in Spanish. The broker who offered it met with a good deal of "chaff," and all sorts of suggestions were offered as to its disposal, a gentleman who recently crossed the rubicon being amongst those who were urged to take it. To that the selling broker responded wittily, and withdrew the lot with a smile.

Spurious Ipecacuanha.

At the Liverpool public auctions on Wednesday 73 bags of so-called ipecacuanha were offered. The brokers made a statement to the effect that a local firm of analysts had pronounced it rich in emetine, while a celebrated London chemist had declared it to be quite devoid of that active principle. They could, therefore, only offer it as "medicinal root." No bids rewarded their candour, and the lot was withdrawn. The article offered was *Psychotria emetica*.

ACONITE-ROOT.—At the auctions to-day 27 bags of Japanese root were offered, but all bought in at 20s. to 22s. 6d. for better sorts, and 16s. for mouldy ditto.

ALOES.—The supply on show struck us as being poorer than usual, but nearly all the *Curaçao* sold—fair livery in boxes, 18s. to 20s. 6d., and low capey, 10s. 6d. East Indian of medium quality sold at 50s., and Socotrine at 46s.

AMBERGRIS.—Several parcels were offered but all bought in, prices ranging from 50s. for dark and strong, to 140s. for 1 tin fine grey lump of good odour, another tin was bought in at 5l., and another, for which a bid of 67s. 6d. was refused, at 95s. These have been up before.

ANISE (STAR).—One lot of 5 cases fair seed sold at 5s. 7d. to 5s. 8d.

ANNATTO.—Two casks bright and dryish paste were bought in at 4½d., and two barrels seeds sold cheaply without reserve (if paying charges) at ½d.; 7 bags clean seeds were bought in at 2d.

ANTIMONY.—Forty cases *Japanese* crude antimony, offered at the auctions, were bought in at 24s.

ARECA-NUTS.—Of 135 bags offered, only 25 sold—5 at 19s., and 20 at the same price subject; for 50 bags good clean a bid of 17s. 6d. was refused, the parcel being bought in at 21s.

ARROWROOT.—Thirty-four cases of Australian, in 1-lb. packages, were offered at the sales, and all bought in at 4d. per package, no bid being made.

ASPHALTUM.—Forty cases were offered, but all bought in—half at 32s. 6d., and inferior sort at 20s.

BALSAM (COPAIBA).—Seven cases were offered, but none sold, although some of it was of excellent quality.

BALSAM (PERU).—Of 9 cases on show none sold; 1 case of two tins worked balsam being bought in at 6s. 9d., 2 cases unworked at 6s. 9d. and 7s. respectively, and 6 cases clean and good at 6s. 6d.

BENZOIN.—The supply was principally made up of *Sumatra* gum, of which there were 178 cases on show, nearly all of it poor or medium quality. Ten cases fair seconds sold at 5l. 15s. 6d., and 22 of a more almondy and odorous gum at 6l. 7s. 6d. Of 55 cases *Siam*, 2 of the best sold at 14l. and 14l. 2s. 6d., this being made up of fine large tears, partly adherent. Forty cases of ordinary low *Palembang* were brought forward, and 20 went back again, their companions selling at 15s., and 15 cases, of good seconds, brought 40s.

BOLDO-LEAVES.—One bale of good but broken leaves was bought in at 1s.

BUCHU.—Of 30 bales offered at the auctions 8 sold; small leaf to medium at 4½d. to 5d.; 7 bales small to bold leaf bought in at 5½d., and *Serratifolia* was also bought in at 10d. There was some very pretty leaf offered, including a parcel of the rarely-seen *B. crenulata*.

CALUMBA.—Of 100 bags offered 75 sold: 74 bags at 14s., damages 10s., and 1 bag marked at 18s. A parcel of 25 bags fair to bold was bought in at 17s.

CAMPHOR.—Eleven cases of Japanese refined camphor in tablets was bought in at 1s. 10d., no bid being made. Forty-four cases Chinese crude were also up for sale, but had not been reached when we were compelled to leave.

CANARY-SEED.—The market has during the last fortnight undergone no material change. The small stocks are now in firm hands, who hope to realise for Turkish 63s. to 66s., Morocco 64s. to 68s., and Spanish 77s. to 82s. per 464 lbs.

CANELLA ALBA.—Ten bales good bright partly bold bark offered, but all bought in at 35s.

CANTHARIDES.—*Chinese*: 23 cases were put up at the auctions, of which 7 sold, broken to bold, at 11d.; fair bold being bought in at 1s. 2d., and small and dusty at 1s.

CARAWAY-SEED.—The new crop is disappointing, and in consequence a sudden strong advance has taken place. Stocks of old seed are small. Good seed, 29s. 6d. to 30s. 6d. per cwt.; Russian caraway-seed, 21s. to 24s. 6d.

CARDAMOMS.—Over 200 packages of various kinds were offered, including a goodly number of fine white *Mysore*. There was comparatively little demand for them, and ultimately only about a half sold. The principal prices obtained were: Fair bold white *Mysore*, 2s. 7d. to 2s. 9d. (mainly subject); the finest lots were bought in at 3s. to 4s. Small to medium *Ceylon Mysore*, pale in colour, 1s. 6d. to 1s. 8d.; duller, 1s. 4d.; some parcels of a bolder character, 1s. 8d. and 2s. 6d.; splits, 1s. 3d. A fair proportion of the *Malabar* met with demand at 1s. to 1s. 5d. for small to medium, and 1s. 6d. to 1s. 8d. for bold, these being chiefly brown.

CASCARA SAGRADA.—Eighty-five bales were offered on Thursday, but by the time the broker reached the lot he was compelled to intimate that the goods had not landed, which explains why no sample was shown on Wednesday.

CASCARILLA-BARK.—At the auctions 19 bales offered, and all sold at from 28s. to 31s. for ordinary small; 1 bale country damaged at 21s.

CASTOR-SEED.—Twenty-eight bags were all bought in at 9s., no offer being made.

CHIRETTA.—Thirty-seven bales, rather rooty, but otherwise good, were bought in at 9d.

CIVET.—At the auctions 8 horns were offered, and all bought in at prices ranging from 11s. to 13s.

CLOVES.—Fair *Zanzibar* is obtainable at 2½d.; and ordinary *Ambony* at 4d. to 4½d.; but nobody was inclined to buy at that figure on Wednesday.

COCA-LEAVES.—Twenty bales fair bright to dull sorts were bought in at 1s. 3d. to 1s. 6d. Most of the offerings were dull leaf, but there were a number of parcels of bright green small leaf, apparently cultivated.

COCCULUS INDICUS.—There were no buyers to-day, and 2 lots of 34 and 50 bags good fruit were bought in at 8s.

CORIANDER is held firmly for 13s. 6d. to 15s. 6d. per cwt.

COWHAGE.—Six tins dusty fibre bought in at 1d., there being no bid.

CROTON-SEED.—One case sold at 20s., subject. It was an old and poor-looking lot.

CUBEBS.—At the auctions, of 36 packages none sold, the parcel being bought in at from 70s. to 80s.; and for dust, 20s.

CUMIN-SEED.—Of 56 bags offered, 45 sold at 30s. to 31s. A parcel "for account of whom it may concern" was also sold at 25s. to 28s. Another parcel of 11 bags was bought in at 35s.

CUTTLE-FISH BONE.—One hundred and twenty six barrels were shown; 10 sold, good bold broken at 2d.; 10 barrels fine clean and unbroken bone were bought in at 3d.; and part of another parcel of 79 at 2½d.; 37 cases pale and mostly whole also bought in at 3d.

DILL-SEED.—Of 130 bags none sold, clean seed being bought in at from 10s. to 12s.

DRAGON'S-BLOOD.—Of 38 cases only 1 sold at 8l. 7s. 6d.; 2 cases fair bright bought in at 70s.; for another case a bid of 8l. 10s. was refused, the package being bought in at 10l. 10s.; two other lots bought in at 10l., and a bid of 8l. 12s. 6d. was refused for 3 cases, which were also bought in at 9l. 15s.

ERGOT OF RYE.—Of 27 bags, 3 sold at 1s. 7½d.; these were just on the turn. Eleven bags small, firm Spanish was bought in at 1s. 11d., and another parcel bold clean at 2s. 6d., and small grey at 1s. 10d.

FENUGREEK-SEED.—Two parcels consisting of 225 bags were offered; 50 sold, subject, at 10s., and 175 bags, pale clean sort, were bought in at 12s.

GALANGAL.—One hundred and thirty-five bales bright root were bought in at 15s.

GAMBOGE.—In fairly good supply, but only 14 cases sold out of 40 offered. Two cases of good pipe sold at 9l. 2s. 6d., and one at 8l. 17s. 6d. For another lot of 6 cases a bid of 12l. 15s. was refused, the lot being bought in at 14l. Six cases more or less blocky sold at 9l. 5s., and 5 consisting of broken pipe at 9l. 15s. Of 25 cases 19 bought in at 13l. 10s., a bid of 12l. 15s. not being accepted; and 3 were also bought in at 10l. 10s. For another parcel of 2 cases a bid of 10l. 10s. was refused.

GINGER.—In little demand, so that the sales were lifeless. In Jamaica a fair business was done at the previous prices—viz., 62s. to 66s. for common to medium, and 120s. to 121s. for fine selected and bold washed.

GUARANA.—Two cases pale to dark sausage were bought in to-day at 3s. 6d. This, we believe, is the actual price of the article.

GUAZA.—Of 62 robbins 32 sold at 4d., dull small to good bold and fairly bright. Siftings were bought in at 3d.

GUM AMMONIACUM.—Sixteen cases were all bought in, pale sorts inclining to lump at 50s., and 1 case small seedy and darkish at 25s.

GUM ARABIC.—This followed the fate of many other articles, and 124 packages offered were all bought in at the auctions to-day. We rather fancied some lots of nice picked white *Turkey*, well suited for medicinal purposes, but, then the price wanted is still high.

GUM (BDELLIUM).—Three barrels fine scented reddish, tear in lump were bought in at 30s.

GUM (GALBANUM).—Two packages of first pile, good pale

partly woody gum, sold at 2s. 11d.; and another parcel not so clean sold at 1s. 3d.; one case dark soft cake was bought in at 3s.

GUM (MASTIC).—At the auctions 12 cases pale amber tears were bought in at 2s. 3d. to 2s. 6d.; and clear tears at 2s. 4d.

GUM MYRRH.—Out of the 93 packages offered 17 sold at 95s.; siftings at 40s. to 70s. Nine cases good pale small to bold were bought in at 6l. 10s., and a bid of 65s. was refused for dull small to larger sorts, which were taken in at 70s.

GUM OPOPONAX.—Two tins were offered, but did not sell; nice fresh gum, of good odour, bought in at 6s.; and a somewhat inferior sort at 5s.

GUM TRAGACANTH.—Eleven cases were offered and all bought in, pale flaky white at 14l., and another parcel at 9l. 10s. to 12l. 10s.

HONEY.—There was not much offered to-day, but about two thirds of what there was sold; all of it being clear *Jamaica*, mostly of amber colour. Prices from 25s. 6d. to 27s.; the lowest parcels only requiring to be strained. None of the white crystallised sold.

INSECT FLOWERS.—Ten bags, good sort, were bought in at 120s. to-day.

IPECACUANHA.—The supply of *Rio* or *Brazilian* which was offered was abundant in quantity, and the quality was fully of the nature that the Drug-club condemn. Nevertheless as the day went on the prices obtained rose considerably, and the market closed with the rates at from 6d. to 1s. above what it was at noon-day, and the last selling-broker was exceedingly firm in regard to his prices, buying in at 6s. 9d. some that he could not get bidders to go above 6s. 5d. for. The prices which ruled were:—Badly damaged (with water), 3s. 6d. to 3s. 10d.; medium damages, 4s. 7d. to 4s. 9d.; trifling damaged root, classified as "firsts" and practically sound but stemmy, 5s. 2d. to 5s. 7d. Later in the day root of the same character sold at 5s. 9d., and undamaged root, annulated and partly stemmy, sold up to 6s. 4d. Of *Cartagena* root exposed the lot which was reached in time had not landed, so could not be sold.

JALAP.—Of 17 bales offered at the sales only 4 sold. A parcel of 10 cases, Tampico character, bold and heavy, was bought in at 1s. 4d., while of another parcel of 7 bales Vera Cruz 4 sold at 1s., the remainder being bought in at 1s. 2d.

KAMALA.—Three cases fair sandy were bought in at 10d.

KOLA-NUTS.—At the auctions 2 bags clean halves sold at 7½d.

KOUSSO-FLOWERS.—Eleven bales were shown to-day, but all bought in—good sorts at 1s., and inferior dull at 7d.

LIME-JUICE.—Two parcels consisting of 12 puncheons were offered and bought in, one lot at 1s. 4d., and another parcel at 1s. 10d., no offer being made.

LINSEED is very firm at the following prices:—*Sicilian*, 56s. to 58s.; *Russian*, 43s. to 44s.; *East India*, 43s. to 44s.; and *River Plate*, 42s. to 45s. per 416 lbs.

LIQUORICE-ROOT.—Ninety-seven bales were shown and bought in at 31s. for better quality down to 12s. for inferior sorts.

MUSK.—The only part of the scent offered which buyers appeared to be eager to secure was "trimmings," which were eagerly bought up at 5d. and 5½d. per oz.; and there was almost equally avidity for empty pods at 5s. 1d. per oz. The prices obtained were—for *Tonquin*, first pile, 77s. 6d.; second, 50s. to 55s.; and third, 25s. to 26s. Two tins of *Yunan* sold at 25s. Some business has, we believe, been done privately, but the market is decidedly dull.

NUX VOMICA.—Fourteen bags clean silky sold at 8s. 6d. per cwt.; and 57 bags old and mouldy to good, offered without reserve, was bought in at 9s. 6d., there being no competition.

OIL (CASTOR).—One hundred and twenty-six cases, of which 86 were said to be more or less rusty, were shown to-day, and all bought in, prices being from 2½d. to 4½d.

OIL (EUCALYPTUS).—Six cases pale oil were bought in at 1s. 5d.

OILS (ESSENTIAL).—At the auctions to-day there was a larger variety than usual of essential oils, but all were bought in with the exception of bay oil, cinnamon-bark, and cinnamon-leaf oil. The prices were as follows:—*Bay oil*: Of 4 cases puce coloured oil of good odour, 2 lots sold at 6s. 3d. and two at 6s. 6d. *Cinnamon-bark*: One case of 12 bottles containing oil of good odour, but not quite clear, sold at 2d. per oz. *Cinnamon*: Bought in at 1½d. *Citronelle oil*: Taken out at 1d. *East Indian Geranium oil*: Nice and clear of good aroma was also bought in at 9d. to 1s. 3d. *Lemon*: Bought in at 5s. 4½ bottles fine old English *Lavender oil* were bought in at 45s. per lb. *Pimento oil*: 4 cases containing 2 tins each were also bought in at 4s. 9d. and 5s. *Cinnamon-leaf oil*: Of 10 cases clear oil 2 sold at 1½d., subject, the remainder being bought in. *Rose*. See page 130.

OPIMUM.—Writing under date July 15, a Constantinople correspondent says that "a general quietness has reigned over the opium market during the month. The new crop is being picked up eagerly by natives in the interior at the parity of 10s. 9d. to 11s. 3d., f.o.b. In consequence, the market here is firm, holders asking 11s. to 11s. 3d. for druggists'. Up to date arrivals of new crop in Smyrna are only 15 per cent. of last year, while in Constantinople not a single case has as yet come in. This may, to a certain extent, be attributed to the late spring which kept the plants back. The fact that natives made money last year on their opium will induce them to hold firmly and, seeing the shortness of the crop, they should find no difficulty in so doing." A Smyrna correspondent says:—"The only sale effected this week was 2 cases current talequale at 11s. 1d., f.o.b. Slightly seconds would be worth to-day about 11s. 3d. If no orders come forward from the American markets our prices for opium may still decline 6d. to 8d. per lb., but as soon as purchases begin our market may be run up again to 12s. for the manufacturing kinds. The arrivals of new opium to date are 51 cases, against 551 at the same period last year. This year's opium—what little we have seen and examined—is of very good quality, both as regards colour and intrinsic value. Prices in the interior are much higher than here, which is generally the case at the commencement of the season. The future price of opium entirely depends upon the demand of the consuming markets."

ORANGE-PEEL.—At the sales 68 cases were offered, but none sold. Good bright thin peel was bought in at 10d., and darker sorts at 9d., while for another parcel 8d. was the price, and 3d. for dull quarters.

ORRIS-ROOT is so dear just now that some dark *Mogadore*, which at ordinary times one would scarcely look at, sold for 49s.

PEPPER.—*Black* is cheaper. Most of the berries offered on Wednesday were "without reserve," and we can scarcely take the prices as ruling figures, but good clean Penang fetched 2½d., and the same price was obtained for fair quality of other sorts. The sales amounted to 585 bags *Acheen*, 350 *Singapore*, and about 90 of all other sorts. *White Penang* fetched 3¼d. to 3½d. for fair. The market is very flat.

QUASSIA.—About 4 tons sold at 92s. 6d.

RHUBARB met with poor request, and but a small part sold. *Canton* medium to good with fair fracture, 1s. to 1s. 2d.; common round high dried, 8½d. *Shensi* of good quality sold at 1s. 6d. to 1s. 8d. The last was in nice round pieces, bright externally, and with a brilliant fracture.

SARSAPARILLA.—Part of the *Jamaica* sold, ordinary dull at 1s. 1d. and 1s. 4d., and the fine bright red root at 1s. 5d. Some oil-damaged stuff fetched 7d., and sea-damaged *Lima*, 8d. to 10d.

SCAMMONY-ROOT was in larger supply than the demand, and only 40 bales of root, with much adherent rootlet, sold at 20s.

SENNA.—The supply of Alexandrian which was put forward was generally of a fair character, but much of the Tinnivelly was below par, and unfit for retail. The common sorts went cheaper; thus, low brown and yellow *Tinnivelly*, small and broken, fetched ½d. to 1½d., and bright leaves, fair to bold, 2½d. to 3d.; pods were 3d. There was no demand for *Alexandrian*, which was all bought in.

SHELLAC.—Recent rates are maintained, but there is little doing. Nice coloured *Orange* can be had at 105s., and some has changed hands at that figure. In October delivery of TN business has been done at 108s.

SQUILL was in good supply and quality. Good firm sold at 1¼d. to 1¾d., and soft slice at ¾d. to 1d.

STROPHANTHUS.—Pale grey sold at 2s., and brown 1s. 6d.

TAMARINDS.—The following business has been done:—Fair Barbadoes, 164 packages at 14s. 6d. It was old Jamaica stuff that sold to-day at 11s. 6d. to 12s.

WAX (BEES').—This was in good demand, and the competition amongst buyers set up the price a little for *Jamaica*, which mostly sold, fair dull to bright mixed at 7l. 7s. 6d. to 7l. 10s., and uniform bright wax of firm texture 7l. 17s. 6d. to 8l. 2s. 6d. Dark *Madagascar*, 6l. 12s. 6d. to 6l. 15s. *Australian*: Ordinary pale grey to yellow mixed, 7l. There was a case of *French* wax in bars the size of household-soap bars, which sold without reserve at 90s. We made it out to be paraffin partly—it was so soft.

WAX (JAPAN).—This sold at 32s. 6d. and 33s.

THE LIVERPOOL MARKET.

CALABAR BEANS.—Further sales have been made, and 1¼d. has actually been taken for one lot.

CANARY-SEED.—The firm position is fully maintained, and value of good bright Turkish is 65s. to 67s. 6d.

CHILLIES.—*Sierra Leone* have recovered, a parcel of 103 bags somewhat off-colour realising 30s., while good red are held for 35s.

GINGER (AFRICAN).—The market has now been cleared, all that offered being bought up at 47s. 6d. to 48s. 6d.

OIL (CASTOR).—The price of good seconds Calcutta is now 2½d., and very firm thereat. French has not been affected by the rise in E.I., and first pressure is still to be had at 2½d. to 2¾d.

TRAGACANTH GUM.—Fifty bags hog sold at 57s. 6d.

WAX.—Eleven sacks African (Gambia) sold at 7l. Chilian is held firmly at late values.

HENRY LAMPLOUGH (LIMITED).—The eighth ordinary general meeting of this company was held at the Cannon Street Hotel on Wednesday. Mr. William Hays, who presided, moved the adoption of the report and accounts, which showed net profits for the year amounting to 3,538l. 8s. 10d., out of which a dividend of 9 per cent. was recommended. The Chairman, in moving the adoption of the report, remarked that he took it for granted that the small attendance at the present meeting indicated a sense of satisfaction on the part of the shareholders. The report submitted to them was extremely satisfactory compared with the time when the committee of investigation was appointed. This committee saw that there was a sound business in the concern, and by persevering in their efforts a good result had followed. Speaking about writing off depreciation, the Chairman said that with regard to the Broad Street lease he was very pleased to tell them that, although they had written that off, they had obtained another lease on very advantageous terms to the company. It was a freehold property, which they had got for 10,000l. It was absolutely unencumbered, and he knew that at that moment, if they wanted to sell the property, they could get 12,000l. for it. But the directors had no intention of selling it, and that would show the shareholders how carefully the board had estimated their assets. Mr. William H. Gibson, F.C.S., seconded the motion, which was carried unanimously. Mr. Gorer then proposed, and Mr. N. Salaman seconded, the reelection of Mr. Thomas F. Lynch at a director. The proposition was carried unanimously, and other formal business terminated the proceedings.

71/60. *T. H. W.* wishes an improvement upon this embrocation. The formula was given him as forming an excellent one, but it separates:—

Sapo. mollis	3vj.
Spt. terobinth	Oj.
Liq. ammon. fort.	3viij.
Camphor	3vj.
Ol. rajii	3viij.
„ succini rect.	3iv.
Ovi vitelli	ij.
Ac. acetic. fort.	3ij.
Aquam ad.	Oij.

M.S.A.

The difficulty is with the ammonia and acetic acid. You must either leave the acid out, or mix the two carefully and gradually in a large vessel by themselves. If you leave out the acetic acid, you might use strong solution of acetate of ammonia instead, and less ammonia. Whichever way you follow, these must be diluted with, say, 10 oz. of the water, and added last. Dissolve the camphor in turpentine, then the soft soap; add the oils. Rub the yolks of eggs in a large-sized mortar, adding the mixed oils very gradually and a very little water occasionally when necessary, so as to form an emulsion (this requires practice); then transfer to a large bottle—say, 120-oz. one—add the water gradually, shaking well, and proceed *s. a.* The use of acetic acid and ammonia in white oils is an old-fashioned and senseless proceeding. The stimulating influence of either is required, and, as neutralisation takes place it is better to omit one of them—the acid when soap is present.

72/12. *Crura*.—Sulphur Hair-restorer:—

Acetate of lead	3iss.
Milk of sulphur	3iss.
Glycerine	3iss.
Rose-water to	3xij.

Rub the lead to a fine powder, add the sulphur, and rub up carefully with the glycerine until thoroughly mixed; lastly add the rose-water.

Milk of sulphur—commercial, not precipitated sulphur B.P.—makes the nicest preparation. Any perfume may be added.

71/61. *Nero*.—We know of no book exactly filling the place of Barber's pocket B.P. Stark's "Practical Pharmacy" (Baillière, Tindall & Cox, 2s. 6d.) is a good book, and the "Pharmacist's Pocket-book," published by Spon at 6s., we find to be useful and generally reliable.

63/23. *Calyx*.—Liq. Santal. Flav. et Copaib. c. Cubeb. et Buchu.—See Liq. santal. flav. co., June 4, 1892, page 819.

71/74. *A Subscriber*.—To Clean Hunting-breeches.—Try this old-fashioned clothes-ball, which is highly recommended for similar purposes:—Pipeclay, 2 lbs.; fuller's earth (whitest obtainable) and whiting, of each 4 oz.; white pepper, 2 oz.; ox-gall, 4 oz.; mix.

62/42. *P. G.*—To Make Coloured Fires containing strontium, chlorate of potash, sulphur, shellac, and charcoal into a paste, use vegetable naphtha. If you use water, syrup, or mucilage, they would be very risky to dry, and would burn too quickly—in fact, explode when lighted. Apart from that, you cannot do work of this kind without an explosives-licence.

62/15 and 73/23. *Nap and Ucheter*.—To Renovate and Varnish an Old Violin.—Thoroughly clean with a mixture of linseed oil and turpentine, of each 2 oz.; glacial acetic acid, $\frac{1}{2}$ oz.; mix. Use a soft rag or piece of lint. Stand aside for twelve hours, and then apply thinly a varnish made according to formula given on page 64, January 10, 1891. If you prefer a French polish, dissolve shellac 3 oz., mastic 1 oz., sandarac 1 oz., spirit 40 oz., with the aid of a gentle

heat. Use this with linseed oil on a pad in the usual way, and repeat the process until the necessary surface is brought up. We may add that revarnishing an old violin (if it is a good one) is a very unorthodox proceeding. **Brown Boot-polish**.—See February 4, page 192, of this year.

46/45. *Liq. Euonym. et Pepsin Co.*:—

Euonymus-bark	5 oz.
Coriander-seeds	1 „
Glycerine	5 „
Water, ...	a sufficiency

Pack the euonymus and coriander-seeds, roughly powdered, in a percolator, add 4 oz. glycerine diluted with 8 oz. water, macerate for two days and percolate; reserve this portion.

Exhaust the marc with water and evaporate to 3 oz.; add the first percolate. Rub up 2 drachms soluble pepsin with 1 oz. of glycerine diluted with 2 oz. water; add this to euonymus liquid, then 1 oz. compound tincture of cardamoms.

Stand for two days, decant the clear portion, and filter the remainder.

Dose: 1 to 2 teaspoonfuls three times a day.

72/51. *A. Z.* (Geneva).—Compressed oxygen is made and supplied in steel cylinders by Brin's Oxygen Company, Horseferry Road, Westminster, London, S.W. Makers of optical goods (magic-lanterns, &c.) who advertise in this journal can supply you with it.

75/22. *Simplex* writes:—"The water we use is charged with sulphuretted hydrogen, and contains some 30 to 40 grains of total solids per gallon. Will the basis 'of necessity' exist as sulphides, or what form? Is there any chemical process by which this sulphuretted hydrogen can be expelled and still allow its being used to make fermented drinks? It seems to poison the yeast and render it incapable of doing its work." It is most probable that the sulphuretted hydrogen exists as an alkaline sulphide. Both this and the free gas kill the yeast organism. The simplest plan for treating the water would be to ascertain its exact alkalinity—*i.e.*, the amount of carbonates and sulphide present—and upon this basis add just sufficient sulphuric acid to neutralise, and boil. But such a water as this should be avoided rather than improved, for imperfect purification may lead to much trouble.

75/37. *Subscriber*.—Gold Paint is made by mixing a sufficiency of powdered gold (Dutch metal) with gold-size or other varnish.

75/1. *W. D.*—Pill for Chronic Rheumatism.—Upon the basis of your requirements we suggest the following formula:—

Quinine salieghat.	gr. iss.
P. resin. gniac.	gr. ij.
Ext. hyoseyani	q.s. ut fiat pilula

A pill to be taken twice a day at 12 noon and 4 p.m.

In such pills as this you cannot advantageously be polypharmic, the tonic being all that can be done in combination with warm clothing.

75/8. *H. H.*—You will find the formula for Wilson's Non-oilaceous Hair-wash in THE CHEMIST AND DRUGGIST, February 6, 1892, page 216.

75/15. *Cucumber*.—Glycerine Cream.—See THE CHEMIST AND DRUGGIST, October 8, 1892, page 565. This is excellent.

75/70. *Bryn Llys*.—Borax is the most popular Starch-gloss for linen. Also equal parts of powder spermaceti and French chalk to be sprinkled over the linen while ironing.

76/3. *B. & S.*—(1) Foot and Toilet Powder.—Nothing better than pulv. ac. boric. subtiliss. alone or mixed with

French chalk and perfumed. (2) **Nursery Hair-lotion.**—THE CHEMIST AND DRUGGIST, July 30, 1892, page 156. We cannot understand how you have missed these in the last four volumes. We found references quickly enough by using the index.

76/28. *Spero.*—**Iron and Quinine Tonic** made with tr. ferri perchlor. inf. quassia, &c., does not keep. After standing for several weeks and filtering, very little additional flocculence separates, but as long as the ferric chloride remains in contact with organic matter there is a tendency to reduction with formation of hydroxide. See formula in the *C. & D.*, January 30, 1892, page 146.

78/22. *Hants.*—An "**Astringent Lotion for the Skin** to prevent and remove wrinkles, also one to promote the growth of eyebrows and eyelashes." A large order, truly. To prevent wrinkles any fatty lotion, such as glycerine and cucumber, may be tried, but the best thing is a liberal application of lanoline cold cream. These are aids. The essentials are regular and temperate living, abundant open-air exercise, rigid cleanliness, especially in regard to the use of the flesh-brush and plunge-bath every morning, and care in washing and anointing the face after undue exposure to sun or cold winds. Of course there is no royal road for the removal of wrinkles. Beauties, like poets, are born, not made, and once time begins to mark them cosmetics make a poor show in the battle for preservation. A weak pilocarpine ointment may be used for the eyebrows—say, a grain of the nitrate to 3ij. of cold cream. This to be applied night and morning with a camel-hair pencil.

79/36. *S. H.*—There is no book of the kind except those issued by makers of essences. Try those who advertise in the *C. & D.*

79/29. *Nemo.*—We find formulæ for **Sachet-perfumes** in almost every volume for the last seven or eight years; in fact, formulæ are so numerous that it would be taking up space uselessly to repeat them. It is not formulæ you need, however, so much as a hint how to go about making any kind. Well, the simplest way of all is to take powdered orris (it should not be too finely powdered), and add to every ounce of it from 5j. to 5iss. of any perfume desired—Jockey Club, heliotrope, &c.—i.e., the ordinary French essences. Or, instead of using them, use the ingredients minus the spirit in due proportion, if time will allow, and you will find formulæ for all of these in back numbers of THE CHEMIST AND DRUGGIST. For a cheap musk-sachet, see THE CHEMIST AND DRUGGIST, May 7, 1892, page 630. The matter which you mention is in hand.

79/52. *Studentus.*—For hints as to the selection of a microscope, see THE CHEMIST AND DRUGGIST, September 19, 1891, page 461. Second-hand instruments you can obtain through our Exchange column.

79/64. *W. & S.*—In the floral-extract formula, vol. xli., page 617, otto of rose ʒss. is intended. The quantity of orris-root in the other formula is ʒij. The present series of "Leaves from a Recipe-book" commenced January 30, 1892, and was continued April 2, 16, and 30, July 2 and 30, September 24, October 22, and one or two sets this year.

79/72. *Climax.*—**Nervine Snuff.**—Bicarbonate of soda is commonly given for a catarrh-snuff, in penny boxes; but the addition of from 1 to 5 per cent. of cocaine hydrochlorate is advantageous.

79/46. *S. B.*—**Colour-feeding for Canaries.**—See THE CHEMIST AND DRUGGIST, May 6, page 640.

83/3. *Tanning.*—See the section of Spon's "Encyclopedia" dealing with "Tanning."

INFORMATION SUPPLIED.

Quintum is ung. plumbi carb.—S. H. (79/36.)

54/56. **Syrup of Iron Chloride (Weld).**—This preparation, for which a correspondent inquired on June 24, is put on the market by Messrs. Parke, Davis & Co.

THE OTTO F ROSE CROP.

A Kewanee correspondent who, we feel bound to say, is himself interested in the otto of rose trade, sends us the following notes on this year's crop:—

"The distillation of the rose crop began in the eight counties of the rose district on June 6 this year. As far as we remember the rose harvest has never before been so late in the season. It is fully eighteen days later than last year's crop. At first this lateness caused considerable anxiety, but, fortunately, the weather has been all that could possibly be desired, and the crop promises to be a very fair one—both in quality and in quantity. In any case it will not be under 65,000 oz., and, if all goes well, it may prove to be as large as 75,000 oz., and even 80,000 oz.

Last year's scare in the otto of rose market was brought about by the fall of white frost during the leafing and budding season; but in spite of the damage caused by the frost, and of the alarmist reports that it had quite ruined the prospects of the new crop, and that the yield would hardly be over 30,000 or 35,000 oz., the yield turned out fully 62,000 oz., and if the weather had proved favourable during the whole season of the distillation, the crop would have yielded even more than 70,000 oz.

The same has been true of this year's crop. As early as February or March reports were purposely scattered on all sides asserting that the extreme severity of the winter had utterly damaged the rose-gardens, and the new crop would hardly be any larger than the crop of 1872. Now, a rigid winter, no matter how intense its cold may be, never causes such a havoc as to utterly ruin the prospects of a crop. Its extreme damage rarely exceeds 25 per cent. of the entire crop. As far as is remembered here the most ruinous winter was that of 1871, which caused the crop of 1872 to fall down to 32,000 oz. It was not so much its intense cold which injured the rose gardens as its absence of snow; and yet its total damage was not over 25 per cent. At that time there were all over the rose district only about 3,000 acres of rose-gardens, while now there are considerably over 5,600 acres of rose-gardens, and were we to consider this last winter fully as injurious as that of 1871, the new crop again could under no circumstances fall as low as that of the year 1872.

Whatever may have been reported regarding the extreme severity of last winter, and the damage it had caused, it is well known to all that this last winter was more noted for the abundance of its snow than for the intensity of its cold. When a rose-garden is well covered by snow it generally stands a pretty low temperature. Nearly three-fourths of all the rose-gardens are in and around villages snugly nestled along the foot of the mountains, and are therefore well protected from the cold and biting winds of the north. A severe winter usually damages only those rose-gardens facing the defiles and gorges of the Balkans, for only they are actually exposed to the north winds.

The exact damage caused by this winter was not fully known before the middle of April, and, as expected, it did not prove a very alarming one, especially as the rose-gardens escaped all visitations from their worst enemy—the white frost. Both March and April were extremely unsteady months—now smiling, now threatening; but, thanks to the backwardness of the spring, they passed without in any way injuring the rose-gardens.

May, on the contrary, has been a most propitious month. For the last six weeks we have had exceptionally favourable weather. Hardly a week has passed without one or two most beneficial showers, and these many showers have developed such surprising vitality in the rose-bushes that the yield of rose-buds has been exceptionally rich."

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TRANSPARENT GLYCERINE	2s. per Box of 3 Tablets			16s.	Per dozen Boxes.

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Sulphate of Soda	...	...	...	...	trace
Chloride of Sodium	...	...	...	...	.035
Moisture	...	...	...	...	.82
Insoluble	...	...	...	...	nil

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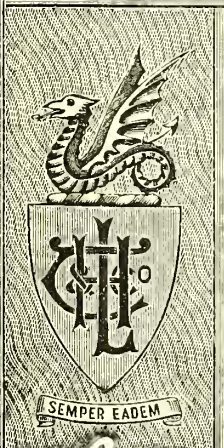
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IMPORTANT CAUTIONS.

From Lord Chancellor SELBORNE, Vice-Chancellor Sir W. PAGE WOOD,
and the LORDS JUSTICES OF APPEAL.

VICE-CHANCELLOR SIR W. PAGE WOOD, by whom the suit in Chancery was first heard, stated in his judgment that "Dr. J. Collis Browne was undoubtedly the Inventor of Chlorodyne, that the whole story of the Defendant Freeman was as deliberately untrue as the falsehood he had deposed to with reference to the use of his Chlorodyne in the Hospital."

The VICE-CHANCELLOR also stated, "that Chlorodyne was a fanciful name, and had application been made sooner, the Court would have given Dr. Browne protection."

LORD CHANCELLOR SELBORNE coincided with the judgment of the Vice-Chancellor upon this point, and stated, "that had application been made at a proper time and place, the Court would have found means to restrain the Defendant from misrepresenting the decision of the Vice-Chancellor."

LORD JUSTICE JAMES, on appeal, stated in his judgment, "that the Defendant Freeman had made a deliberate misrepresentation of the decision of Vice-Chancellor Wood."

It was proved in Court, on affidavit by Mrs. Forbes, of Paris, that the testimonial published in the *Times*, November 14th, 1865, speaking of the great efficacy of Chlorodyne in Cholera, referred to Dr. J. Collis Browne's Chlorodyne, and that she never used any other, that she had written to the Defendant Freeman to that effect; notwithstanding which notice the Defendant publishes the said testimonial as referring to his medicine.

The Editor of the *Medical Times*, in his report on Chlorodyne, January 13th, 1866, gives information that the Chlorodyne referred to was the medicine introduced by a retired Army Medical Officer, which was Dr. J. Collis Browne; still this is published by the Defendant as testimony to his medicine.

Numerous affidavits from eminent Physicians and others were produced in Court, stating that Dr. J. Collis Browne was the inventor of Chlorodyne, and that when prescribing they mean no other.

The Defendant himself publishes that his compound is in effect and composition quite different to any other preparation; nevertheless he assumes the name, testimonials, &c., of Chlorodyne.

Technicalities in law prevent that protection which the public should justly have against such a course of conduct. It is now incumbent on all who purchase Chlorodyne to see that the name, Dr. J. Collis Browne's Chlorodyne, is engraved on the Government Stamp, as it is not sold otherwise. All other compounds under the name of Chlorodyne are spurious. All attempts at analysis have failed; hence the statement that the constituents of Chlorodyne are known is a misrepresentation.

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Barron, Harvey & Co.,	London	Gratton & Co.,	Belfast	Peake, Allen, & Co.,	Dublin
Bell, John, & Co.,	"	Grimwade, Ridley,	London	Raimes & Co.,	York
Bourne & Taylor,	"	Grindley & Son,	Chester	Raimes & Co.,	Edinburgh
Corbyn & Co.,	"	Hearon, Squire & Francis,	London	Sang & Barker,	"
Cox & Gould,	"	Hodgkinson, Tonge & Stead,	"	Sanger, J., & Sons,	London
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Crystals
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Celerina,
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From the British
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Our Extra Steam Refined quality is a firm, hard, dry, and snowy-white crystals, entirely free from oily contamination, and therefore of the highest melting-point. As the original and largest manufacturers in the world of the true Japan Menthol, we guarantee our brand to be absolutely pure. Beware of substitutes. For full particulars, therapeutic uses, &c., see special circulars, to be had on application.

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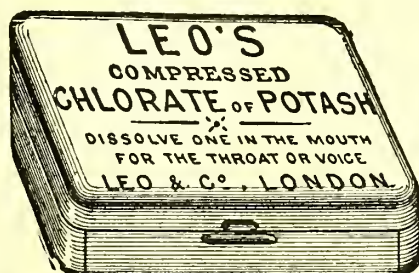
INDEX AND BUYERS' GUIDE

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warm climates.



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A NON-TOXIC ANTISEPTIC FOR BOTH INTERNAL AND EXTERNAL USE.

LISTERINE.

NON-TOXIC NON-IRRITANT, NON-ESCHAROTIC—ABSOLUTELY SAFE, AGREEABLE, AND CONVENIENT.

FORMULA.—LISTERINE is the essential antiseptic constituent of Thyme, Eucalyptus, Baptisia, Gaultheria and Mentha Arvensis, in combination. Each fluid drachm also contains two grains of refined and purified Benzo-horacio Acid.

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LISTERINE is a well-proven antiseptic agent—an antizymotic—especially useful in the management of catarrhal conditions of the mucous membrane, adapted to internal use and to make and maintain surgical cleanliness—asepsis—in the treatment of all parts of the human body, whether by spray, injection, irrigation, atomization, inhalation, or simple local application, and therefore characterized by its particular adaptability to the field of

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DIETETIC NOTES,

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CAUTION! SPECIAL NOTICE TO THE TRADE. LION OINTMENT AND PILLS.

DEACON v. BURGESS.

In the High Court of Justice, Chancery Division, on Saturday, December 17th, Mr. Justice Kekewich, in delivering judgment, said "that it will be sufficient, I think, and I am sure quite safe now to say that the plaintiff (Mr. H. J. Deacon), who certainly has not proved his knowledge of the genuineness, but who has clearly indicated his ignorance, and who is attempting to sell as genuine medicine that of which he is really ignorant." N.B.—A full report of the Judgment appeared in THE CHEMIST AND DRUGGIST, December 24 last.

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The Trade is respectfully requested to refer to the issues of "THE CHEMIST AND DRUGGIST" of December 10 and 17, and to read the Statutory Declaration made by E. Burgess, Junr., before the Lord Mayor of London. E. B., Junr., is the only person living with the knowledge of method of manufacture of these Remedies, and all statements to the contrary are untrue.



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Embracing the Therapeutic Properties of the **COCA** Plant, blended with the best Madeira.

The VINACOCA is carefully prepared from the best Coca Leaf only. (No Addition of Cocaine.)

**ONLY ONE WINE (CHOICE MADEIRA)
ONE QUALITY (A)
ONE PRICE** } **THE BEST & CHEAPEST ON THE MARKET.**



The best Restorative is
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FOREIGN SPECIALITIES & MEDICINES.

REVISED PRICE LIST.

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FOREIGN AND ENGLISH CHEMISTS,

WHOLESALE, IMPORT, AND EXPORT AGENTS FOR

FOREIGN MEDICINES AND PATENTS,

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Retail	Per doz.	Retail	Per doz.	Retail	Per doz.	Retail	Per doz.
4/8..Alcool de Menthe Riquies	41/6	4/8..Capsules Matico	35/	2/3..Guyot's Liq. Gendron	18/	2/8..Rabuteau's Drgées Ferrug.	24/6
2/8.. Ditto ditto	21/	4/8.. " Mathey Caylus	35/	9/..Laville's Gout Tincture	81/	7/.. " Elixir Ferrug.	65/
2/9..Anbergier's Syrup	27/	4/8..Chassaigne's Wine	39/	9/.. " Pills	78/	2/9..Rabuteau's Syrup Ferrug.	24/6
1/9.. " Pâte	15/	2/9.. " Pills	24/	1/1..Papier Fayard	6/9	4/..Roachont des Arabes	31/
6/8..Bay Rum	57/	4/8..Olin's Dragees Bromide Cam.	45/	2/3.. Ditto	13/6	4/8..Reynal's Bongles	38/
3/8.. Ditto	31/	5/..Bau de Botot (Genuine)	40/	2/3..Papier Fruneau	14/6	2/9..Ricard's Injection	24/
2/..Beiloe's Charcoal	15/	3/.. Ditto	24/	4/.. Ditto	24/6	4/8.. " Capsules	38/
1/9.. " Lozenges	15/	2/..Espio's Cigarettes	13/6	1/9..Pâte d'Anbergier	15/	9/.. " Syrup	90/; 4/6, 42/
4/8..Blancoard's Pills	32/	4/8..Elixir de Coca (Mariani)	48/	1/9.. " de Berthé	15/6	1/8..Star Paper	11/
2/8.. Ditto	18/	2/9..Flon's Syrup	23/	2/9.. " de Coca Mariani	25/	1/9..Vallet's Pills	14/8
4/8..Bren's Injection	27/	2/9..Gayetty's Paper	23/	1/9.. " de Georgé	14/6	2/9.. Ditto	23/
4/8..Bugeaud's Wine	38/	2/3..Grauules Arsen. Acid	13/8	1/1.. " Ditto	9/	4/8..Veloutine (White, Pink, Oim.)	28/
3/8..Bully's Vinegar	30/	2/9.. " Iron	14/5	1/8.. " de Nafé	13/6	3/8.. Ditto ditto	22/
2/.. Ditto	14/6	2/9.. " Soda	15/4	1/9.. " Regauid	14/6	2/9..Viohot's Trochisques	22/
4/8..Canadé's (Lait Antéphil.)	38/	2/9..Grimault's Syrup Lime	24/	7/..Pierlot's Valerian	60/	4/8..Via Mariani	38/
4/8..Capsules Bromide Camph.	45/						

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[1823.

47

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Sold universally by Chemists and Patent Medicine Dealers.

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The most saleable Patent Medicine in the market.

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OXY-IODINE COMPOUNDS.

AS SUGGESTED BY DR. HUGH WOODS.



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WAX.**



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Essence 1/6	...	...	Per dozen, 15/-, less 10 per cent.	Liniment 1/9	...	...	Per dozen, 20/-, less 10 per cent.
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Extract 1/-	...	...	" 9/- " 10 "	" 2/3	...	...	" 20 - " 5 "
Ointment 1 1/2	...	...	" 11/- " 10 "	Dry Inhalers, complete 1/6	...	...	" 14/- " 10 "
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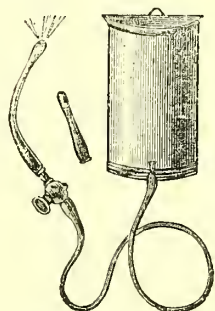
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THE CHEAPEST AND BEST IN THE MARKET.

DOUCHES.

REDUCED PRICES.

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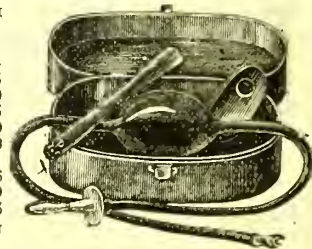
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Patentee and Sole Manufacturer, J. T. COCKING, PLYMOUTH.

Jacket.

Cervical Jacket, No. 1.

Cervical Jacket, No. 3.

JACKET

(In cases of slight deformity).

INSTRUCTIONS

FOR MEASUREMENT.

Circumference at axilla.

" waist.

" hips.

Length from axilla to great trochanter.

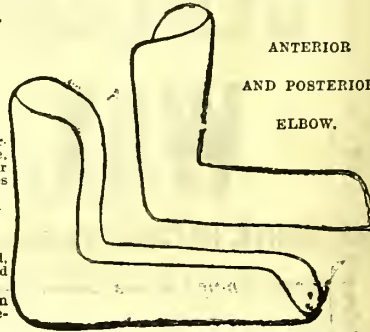
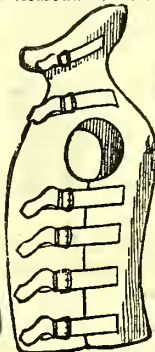
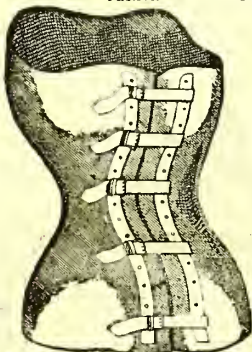
In severe angular cases, circumference over apex of curve, position of ditto, and contour should be given; in lateral cases a description of the case.

In all cases it must be stated if for male or female.

CERVICAL JACKETS.

Same measurements required, and circumference at neck, and length from neck to axilla.

Any part of the Jacket can in the process of manufacture be left soft.



ANTERIOR

AND POSTERIOR

ELBOW.

A FULL LIST OF SPLINTS AND PORO-PLASTIC IN SHEETS MAY BE HAD ON APPLICATION.

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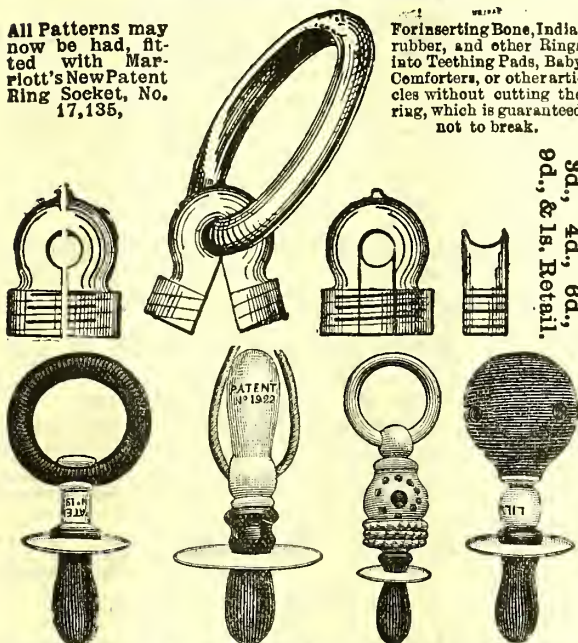
Letters Patent.

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The teats are seamless, and always retain their proper shape.
THE CHILD CANNOT POSSIBLY IMBIBE AIR.

All Patterns may now be had, fitted with Marriott's New Patent Ring Socket, No. 17,135,

For inserting Bone, India-rubber, and other Rings into Teething Pads, Baby Comforters, or other articles without cutting the ring, which is guaranteed not to break.



3d., 4d., 6d.,
9d., & 1s. Retail.

Patentees and Manufacturers, **E. MARRIOTT & CO., HASTINGS**
FOR OTHER PATTERNS SEE 1893 DIARY, PAGE 295.

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Before ordering the above of any other house, please write for a sample of our latest production in best White Flint Glass. We supply them **36/-** per gross; two gross lots are Carriage Paid to any address in England, and include name and address on the Bottles free.

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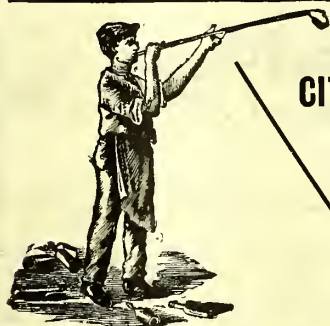
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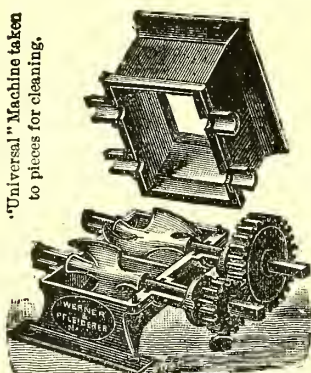
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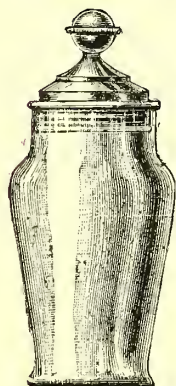
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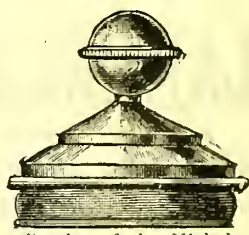
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Section of the Nickel
Stopper when closed.

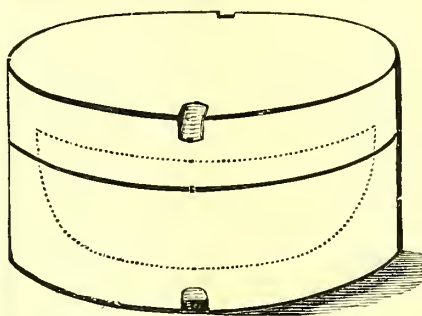
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1/6	1/6	1/6	1/8	1/10	2/-	2/3	2/10	3/6	4/6 5/6 per doz.
THIN FOR DISPENSING—									
1/2	1/2	1	1 1/2	2	3	4	6	8 ounces.	
1/7	1/9	2/-	2/2	2/5	3/-	4/-	5/-	6/-	per doz.

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